



## RESEARCH PAPER

# Neuro-linguistic programming and learning: teacher case studies on the impact of NLP in education

Full report

John Carey, Richard Churches, Geraldine Hutchinson,  
Jeff Jones and Paul Tosey

Foreword by John West-Burnham

## Welcome to CfBT Education Trust



CfBT Education Trust is a top 50 UK charity providing education services for public benefit in the UK and internationally. Established 40 years ago, CfBT Education Trust now has an annual turnover exceeding £100 million and employs 2,300 staff worldwide who support educational reform, teach, advise, research and train.

Since we were founded, we have worked in more than 40 countries around the world. Our work involves teacher and leadership training, curriculum design and school improvement services. The majority of staff provide services direct to learners: in nurseries, schools and academies; through projects for excluded pupils; in young offender institutions and in advice and guidance centres for young people.

We have worked successfully to implement reform programmes for governments throughout the world. Government clients in the UK include the Department for Children,

Schools and Families (DCSF), the Office for Standards in Education (Ofsted), and local authorities. Internationally, we work with educational ministries in Dubai, Abu Dhabi and Singapore among many others.

Surpluses generated by our operations are reinvested in educational research and development. Our research programme – Evidence for Education – aims to improve educational practice on the ground and widen access to research in the UK and overseas.

Visit [www.cfbt.com](http://www.cfbt.com) for more information.

## Acknowledgements

This research publication could not have been produced without the 24 teachers who put so much effort and personal time into the case studies: **Nina Blanchet, Tracey Burns, Louise Causer, Robin Charlton, Rachael Coull, Joanna Dobson, Helen Fuhr, Gillian Hogg, Laura Holland, Nicola Hurst, Stephanie Kidd, Louise Lightley, Emma Loader, Jaqueline Lorimer, Nigel Maddison, Julie Newton, Fiona MacGregor, Ian McDuff, Diane Murphy, Mark Phillips, Simon Potter, Zoe Ryan, Erica Tait, Emma Volpe, Michell Whall and Janice Woods.** We would like to thank them particularly for their contributions to this paper and for the support of their schools in carrying out the research projects. Acknowledgement should

also be made to the Training and Development Agency for Schools (TDA) for providing initial funding to train some of the teachers in NLP as part of the grant-funded Leading Thinking project. Finally thanks go to the University of Surrey NLP Research Project for providing access to its NLP research database and particularly to Jane Mathison for access to her research and work.

## Contents

Acknowledgements	2
About the authors	4
Abstract	4
Foreword	5
Executive summary	6
1. Purpose and background to this research paper	7
2. The evidence about the use of NLP in education – a review of the literature	9
3. Background to the teacher-led action research case studies	13
4. Methodology	16
5. Teacher evidence in the 24 case studies – a summary	19
6. Wider benefits and impact of the project	26
7. Summary and general conclusions about NLP and current thinking in education	30
8. Recommendations for further research	33
9. Glossary for the areas of NLP that were the focus of the various case studies	35
Appendix 1 – The evidence about the use of NLP in education – a review of the literature (continuation and detailed evidence and discussions)	37
Appendix 2 – The 24 teacher case study write-ups	57
References	97

The views and opinions expressed in this publication are those of the author and do not necessarily represent the views of CfBT Education Trust.

© CfBT copyright 2010 All rights reserved

This report is available at [www.cfbt.com](http://www.cfbt.com)

## About the authors

**John Carey** was Senior Education Inspector in Durham Local Education Authority and is now Director of Still Point Solutions Ltd. He leads the North East's consortium of schools, local authorities and the universities of Durham, Newcastle, Northumbria and Sunderland delivering the new Masters in Teaching and Learning (MTL).

**Richard Churches** is Principal Consultant for National Programmes at CfBT Education Trust. Over the last seven years, he has been the professional lead for a number of major government education reform programmes. He is also a member of the University of Surrey NLP Research Programme.

**Geraldine Hutchinson** is Assistant Director for National Programmes at CfBT Education Trust. For over a decade she has led numerous significant national government initiatives as well as writing research. Before joining CfBT Education Trust she was at South Bank University.

**Jeff Jones** is Principal Consultant at CfBT Education Trust. He has researched and published extensively in the areas of continuing professional development, school leadership and management, performance management, and school governance.

**Paul Tosey** is the Senior Lecturer in the School of Management at Surrey University. He is a leading authority on the academic appraisal of NLP and co-author with Jane Mathison of *Neuro-Linguistic Programming: A Critical Appreciation for Managers and Developers*.

This paper was first presented at an Education Show seminar, sponsored by CfBT Education Trust on 6 March 2010. Conference paper versions of the literature review and case study research will be presented at the 2nd International NLP Research Conference at the University of Cardiff in July 2010.

## Abstract

This research paper reports on evidence from 24 teacher-led action research case studies and builds on the 2008 CfBT Education Trust published paper by Richard Churches and John West-Burnham 'Leading learning through relationships: the implications of Neuro-linguistic programming for personalisation and the children's agenda in England'.

The current research focused on two gaps in the research literature:

- The absence of any formal and systematic literature review of evidence in relation to the impact and use of NLP in education
- The lack of any substantive teacher-led and classroom-based action research in this area.

Teachers followed the Teacher Learning Academy framework in designing and implementing their research – a framework that CfBT Education Trust was closely involved in the development of. All of the case studies

demonstrate significant impact in relation to teacher development, with many demonstrating positive impacts on pupil learning outcomes. The paper also contains the first systematic and comprehensive literature review of research evidence into the impact of NLP in education and discusses the content of 111 papers and references including quantitative and qualitative research evidence. The majority of published work was found to be supportive of the use of NLP in schools and education although, as the authors point out, this should only be considered as an interim finding because of the wide range of methods used and variations in the quality of some of the research.

To reference this research:

Carey, J., Churches, R., Hutchinson, G., Jones, J. and Tosey, P. (2009) (foreword by John West-Burnham) *Neuro-linguistic programming and learning: teacher case studies on the impact of NLP in education*, Reading: CfBT Education Trust.

## Foreword



“...a balance of authoritative thinking about the nature of the learning process combined with compelling and convincing case studies.”

After thousands of years of formalised human education we still seem to be no nearer to a degree of consensus as to what might constitute an effective educational process. If we set aside the contextual variables that play such a pivotal role in educational success – factors such as the family, social class and poverty – then we can begin to explore the key school based variables – the curriculum, teaching and learning.

... among school level variables, the factors that are closest to student learning, such as teacher quality and classroom practices, tend to have the strongest impact on student achievement.

(Pont *et al*, 2008: 33)

It's probably fair to say that we have explored most permutations of what a curriculum might comprise. In spite of the stubborn focus on subjects and the burden of information we can be reasonably confident that we understand the possibilities of a curriculum.

It might be argued that the interaction between teaching and learning is that of the relationship between art and science. We probably know more about effective teaching than ever before and the artistry of the skilled teacher, mentor or facilitator is a vital element of effective learning. Equally we are growing in confidence about the scientific basis of learning:

*Education is neither writing on a blank slate nor allowing the child's nobility to come into flower. Rather education is a technology that tries to make up for what the human mind is innately bad at.*

(Pinker, 2002: 222)

Our genetic and evolutionary inheritance means that we have a predisposition to speak; we do not have such a predisposition to write or to read. Education is a process of compensating for gaps in our biological inheritance and adapting natural predispositions 'to master problems for which they were not designed'. (Pinker, 2002: 223)

*And this offers priorities for educational policy: to provide students with the cognitive*

*tools that are most important for grasping the modern world and that are most unlike the cognitive tools they are born with.*

(Pinker, 2002: 235)

This is an argument for both a better understanding of the impact of our genetic inheritance and recognition that the blank slate and genetic determinism arguments are both wrong. Ridley (2003) argues:

*Nature versus nurture is dead. Long live nature via nurture.*

(Ridley, 2003: 280)

Our capacity to learn is the result of complex interactions and if we are to respond to the imperative of securing excellence and equity across the education system we need to enhance our understanding of how to maximise effective learning and teaching. That is exactly what this timely and significant report does. For the first time it offers a balance of authoritative thinking about the nature of the learning process combined with compelling and convincing case studies of successful practice. This report provides a comprehensive and detailed survey of how NLP relates to effective learning and teaching and so increases our confidence in continuing to explore and extend our understanding of its potential.

**John West-Burnham**  
**Professor of Educational Leadership,**  
**St Mary's University College**



## Executive summary

“This research has provided a unique opportunity for teachers to present their first-hand practice evidence...”

The aim of this report is to address two significant gaps in the research literature: the absence of any formal and systematic literature review of evidence in relation to the impact and use of NLP in education, and the lack of any substantive teacher-led and classroom-based action research in this area. NLP is a relatively new field of study, especially in relation to its application within education, and this may well have contributed to this gap in the literature; however, given the general consensus on the importance of interaction and communication in teaching and learning (alongside subject knowledge), the extent of the gap is perhaps hard to explain. The 24 teacher-led action research case studies presented in this report demonstrate that ‘teachers’ recognise the importance of communication in effective learning and teaching, and more so, understand the potential of the application of NLP to achieve this, particularly in relation to language and learning, rapport, interpersonal skills and flexibility.

NLP is aligned in the literature to wide-ranging fields of practice, which perhaps normally are considered separate and which have distinctly different stakeholders. However, presence in the academic arena is still sparse – a fact that is noted in the first comprehensive appraisal of NLP that was published this year – *Neuro-Linguistic Programming: a critical appreciation for manager and developer* (Tosey and Mathison, 2009) and in *Neurolinguistic psychotherapy: a postmodern perspective* (Wake, 2008); both of which have sought to reposition NLP as a field ripe for serious academic study.

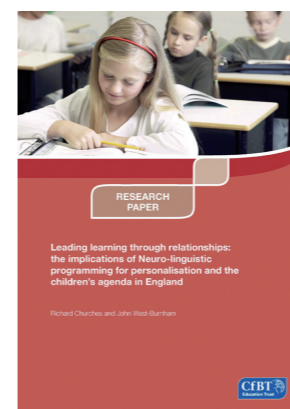
The systematic review of literature in this publication includes the documentation and analysis of 111 references, including many that contain quantitative and qualitative evidence. Whilst the territory of NLP is sometimes portrayed contentiously (though often in writing that is not based on substantive evidence) the majority of research papers and perspectives contain discussions about the use of NLP in classroom practice that are positive towards it. It was also clear from the literature that contrary to some popular opinion, there have been a number of academic publications on

NLP that are supportive of its use in schools and education in general.

The teachers involved in the case study teacher-led action research published here used the General Teaching Council of England (GTCE)’s Teacher Learning Academy (TLA) framework as a structure for recording their learning. This meant that if they wished, they could submit their work to the TLA for professional recognition: so far three teachers have achieved accreditation at Level 1 and a number of others are moving in this direction. The case studies analysed here offer insights into key NLP strategies, tools and practice that can be used in the classroom to create impact on relationships, behaviour, learning and pupil achievement and teaching effectiveness. Increasing young people’s access to learning opportunities, improving their achievement and adding value to teacher effectiveness are inextricably bound to the public investment made in teacher training, both initial and continuing. The goal surely is to increase benefits for ever-increasing numbers of learners in cost-effective and efficient ways, starting with teacher classroom practice.

This research has provided a unique opportunity for teachers to present their first-hand practice evidence and for this to be placed in a research context so that there is a firm basis for future discussions and an evidence-led evaluation of NLP applied within teaching. A key driver of this paper was the objective to facilitate teachers’ reflective practice, and to share the learning derived from that reflection within and beyond the education community. The connection between development, practice, research and policy that this paper seeks to influence through taking as its starting point teacher evidence of the impact of new practices, materials and capabilities, uncovers the questions that research needs to address. New knowledge and skills development for teachers is a key outcome of these case studies and in an education system where social and economic prosperity are goals the way in which knowledge about educational practice is presented and applied is of major importance.

## 1. Purpose and background to this research paper



“This resulted in the inclusion of a number of new ideas from psychology and other related disciplines.”

In 2008 CfBT Education Trust published a research paper by Richard Churches and John West-Burnham: *Leading learning through relationships: the implications of Neuro-linguistic programming for personalisation and the children’s agenda in England* (Churches and West-Burnham, 2008). This paper discussed research and thinking on the importance of interpersonal and intrapersonal effectiveness for teachers, school leaders and school improvement, and explored implications of the use of Neuro-Linguistic Programming (NLP) in relation to personalisation and the children’s agenda. It outlined initial research carried out as part of the Fast Track Teaching programme – the UK government accelerated leadership development programme (a contract that CfBT Education Trust held with the Department for Education and Skills (DfES) and then the National College for School Leadership (NCSL) for eight years). The paper also included a brief summary of the use of NLP as part of the London Leadership Strategy and made suggestions for further research. Evidence from this paper was presented at the First International NLP Research Conference at the University of Surrey in July 2008 (Churches and West-Burnham, 2009).

The inclusion of NLP in the Fast Track Teaching programme evolved from a recognition of the importance of communication skills in effective teaching as a support to subject knowledge and sound pedagogy; and in relation to effective influencing in school leadership. It was clear from the outset that there was, at the time of the inception the programme, little training and development that could be said to have got to the heart of the challenge of effective communication. CfBT Education Trust consultants audited and attended a wide range of training from within education, as well as from the private sector, in order to identify training that might fill this development

gap. This resulted in the inclusion of a number of new ideas from psychology and other related disciplines. All such inclusions, including NLP, were piloted on a trial basis with a view to identifying those that the teachers themselves pointed to as being effective and then researching their impact. In this sense, development by necessity came before research; and the use of NLP on Fast Track parallels some of the processes identified by Andrew Morris, Charles Desforges and others (Morris, 2004; Desforges, Morris and Stanton, 2005; Morris, 2009) as being important for the further evolution of teaching as an evidence-based profession. In particular, in 2004 the National Education Research Forum recommended two strategic priorities:

- the creation of a national evidence system, accessible to all
- the encouragement of programmes that combine development and research (NERF, 2004) (Desforges, Morris and Stanton, 2005: 3)

CfBT Education Trust has embraced both of these concepts, firstly in its support for the development of an online Educational Evidence Portal (eep)<sup>1</sup> and secondly with some of our key national delivery programmes such as Fast Track Teaching and our subsequent ongoing interest in Development and Research in areas such as NLP in education, coaching and the application of ideas from applied psychology to educational leadership. Research papers are currently in preparation across all of these areas.

The first research paper by Churches and West-Burnham (2008) was primarily a perspectives paper and the need to publish research on both the impact of NLP on children and teacher professional development was clearly highlighted by this publication. The

<sup>1</sup><http://www.eep.ac.uk/>, accessed 17 November 2009.

paper noted the strongly positive way in which NLP had been received by a large number of teachers and identified areas for the application of NLP. It was also clear that no systematic literature review had yet taken place in relation to NLP and education.

The purpose of this research publication is two-fold: firstly, to document the extent and scope of publications on NLP (both research

publications and the growing popular literature); and secondly, to fill a key gap in the evidence which emerged from that literature review (namely the lack of teacher-led action research case studies). As well as these aims, this second publication has sought to extend the research evidence beyond participants on the Fast Track Teaching programme and records evidence of impact from teachers without a direct connection to the programme.

## 2. The evidence about the use of NLP in education – a review of the literature

“The purpose of this review is to scrutinise the published evidence and academic opinion on the effectiveness of NLP to support teaching and learning...”

The review focused on the publication in the English language of academic research, perspectives and articles on the use of Neuro-linguistic programming (NLP) in education. However, we are also aware of a developing literature in other languages, particularly in Europe (see e.g. Hager, 1989; 1990; 1992; Otto; 2006; Özmen, 2009; Schaefer and Schajor, 1999; Zechmeister, 2003).

There have been occasional critical academic commentaries (Marcus and Choi, 1994; Craft, 2001), brief critical comments (Lisle, 2005; Burton, 2007) and at least one negative discussion in the popular press (e.g. Beadle, 2008) on the use of NLP in education. However, none of these has been based on a review of the specific NLP research evidence and literature (as is noted by Tosey and Mathison, 2009). The purpose of this review is to scrutinise the published evidence and academic opinion on the effectiveness of NLP to support teaching and learning, and thereby to put the 24 teacher-led action research case studies contained in this paper into a research context. As such, we believe that this is the first extensive review of the literature on NLP in education to be published.

### Methodology and scope of the review

An initial literature search focused on the Australian Education Index (AUEI) – 1979 to date, British Education Index (BREI) – 1975 to date and the Education Resources Information Centre (ERIC) – 1966 to date. This produced 89 unique references and eight duplicate references.<sup>2</sup> Review of these references revealed 30 references that were

both education-related (schools, further and higher education, adult learning and/or the use of NLP with children) and published in academic or partially academic publications (what is sometimes known as ‘grey literature’), including conference papers and unpublished theses. Alongside this, two online databases that list, respectively, 193 and 311 references to NLP in journal articles, papers and dissertations were analysed and assessed including the database which is hosted by the University of Bielefeld in Germany.<sup>3</sup>

A further cross-check was made with a list of research references hosted by the NLP Research and Recognition Project.<sup>4</sup> These databases contained an additional 33 unique references that fulfilled the search criteria. These data sets are discussed below alongside 39 other references and papers that were recorded within the NLP and Research Project, based at Surrey University.<sup>5</sup> This includes three education papers presented as part of the First International NLP Research Conference (in Tosey, P., 2009). A total of 111 out of 171 references have been included in the formal analysis. In the vast majority of cases we have been able to review the full publication; however, on occasions we have included evidence from author abstracts alone but only where these have provided sufficient evidence for analysis.

In relation to the scope of the review we included a wide range of sources:

- Journal articles (although in many cases it was difficult to ascertain the depth or scope of peer review processes)
- Conference papers

<sup>2</sup> 1 July 2009. Search criteria: all references to *Neurolinguistic programming* OR *Neuro-linguistic programming* OR *Neuro linguistic programming*. Data from the three sources was combined and all repetitions removed.

<sup>3</sup> <http://www.inspiritive.com.au/nlp-research/database.htm>; <http://www.nlp.de/cgi-bin/research/nlp-rdb.cgi>, 14 July 2009.

<sup>4</sup> <http://nlprandr.org/>. Note this list of references is only available on registration with the site, accessed 2 December 2009.

<sup>5</sup> <http://www.nlpresearch.org>, accessed 14 July 2009.

- Articles which had some form of university affiliation and articles whose writers had some form of university affiliation or track record in research
- Papers connected to government programmes and which presented evaluation data
- Postgraduate level research findings (both at Masters and Doctoral level)
- Practitioner findings published in journal articles and papers with some element of university or recognised research organisation affiliation.

These mean that informal research findings and perspectives have been presented alongside more formal methodologies and writings. Our intention, however, was to be comprehensive rather than to provide a detailed critical reading. No doubt, as fields of study develop in the various domains and sub-domains of the topic, some references will slip into obscurity as more robust evidence is documented and emerges. Indeed there is a wide range of quality in relation to the methodologies used in the studies and in the extent to which the findings can be viewed as secure. Where we have serious concerns about the methods used, or the presentation of findings, we have indicated these in our discussions. A widely scoped review like this will, we hope, improve and give more depth to any pre-research review of evidence prior to education research in areas where studies have already taken place.

In terms of the scope of the content we have taken an equally broad view on the definition of 'education'. Thus we have included content that relates to research evidence or perspectives such as informal adult learning as well as more obvious education domains such as classroom practice. In doing so we are aware that the scope of the review might be considered too broad by some readers; however, growing interest in the effectiveness of the adult learning of teachers themselves and its effect on pupil outcomes may mean that some researchers find these sources of interest alongside the publications that relate specifically to children and young people. We did not, however, include areas such as: training in general, counselling, psychotherapy and family therapy.

Opinion pieces from teacher professional magazines were not included even where these were from recognised researchers or respected authorities.

**Throughout this summary and in the extended review (see the appendices), references included in the formal analysis are (from this point on) indicated with an asterisk (e.g. Hillin, 1982\*).**

### Summary of findings

It is sometimes implied that there is little or no evidence base for areas of teacher professional practice such as NLP (see e.g. Burton, 2007\*) or in relation to NLP in general (Heap, 1988; 2008; Roderique-Davies, 2009). However, as this systematic review demonstrates, there has been a growing and developing education literature which refers to both adults and children right from the time of the publication of the earliest popular books on NLP and teaching and learning (Harper, 1982; Dilts, 1983a; Jacobson, 1983 – see for examples of early research: Hillin, 1982\*; Fruchter, 1983\*; Knowles, 1983\*). Furthermore, criticisms (where they exist) are often made at a theoretical or 'in principle' level rather than from an evidence-based position.

The review highlighted two other issues:

- What NLP research literature there is, is rarely cross-referenced to, or cited within, the NLP informed research, even though some topics have been researched before and the results are accessible.
- Few researchers or commentators have carried out any form of literature review prior to the conducting of research.

This is perhaps the result of the general assumption that there is no evidence or research available or because a significant amount of the available evidence has only emerged in the last few years (22 out of the 92 accessible papers and publications reviewed below are from 2007 onwards). In addition, although much of the recent evidence has a university department origin, only a small amount has as yet been published in easily accessible journals.

Churches and West-Burnham (2008; 2009)\* suggest that NLP tools and techniques relevant to teachers and school leaders can be classified in four ways:

- **Outcomes**  
Strategies and approaches for self-motivation and the motivation of others
- **Rapport**  
Approaches for building rapport and influencing others
- **Flexibility**  
Techniques for developing personal flexibility and awareness of others
- **Language**  
Language models from hypnosis and therapy (Churches and West-Burnham, 2008: 7)

Although the number of NLP-related papers (including research publications and dissertations) is relatively small, there was some evidence in relation to each of these areas, particularly in relation to language and learning, rapport and interpersonal skills and flexibility.

There was a mixture of both qualitative and quantitative evidence, with a smaller number of papers that provide perspectives without associated evidence. Most of the papers that contain specific evidence (52 out of a total of 57) contained findings which their authors claim to be confirmatory of some identified elements of the NLP model, or contained positive interpretations of evidence in relation to the effect on children, teachers and/or learners in general. A review of perspectives-type papers and articles (those which offered only opinion or theoretical analysis) (35) shows that 31 are positive in their support for the use of one aspect or another of NLP. This said, the depth, quality and extent of the evidence varied considerably across the literature from single case study evidence to more extended research with larger groups of participants. Alongside this, there was a wide spectrum in relation to what is considered evidence of effectiveness. To illustrate the width of evidence we have included publications that report on apparent evidence of impact as well as formal research studies. A visual map, by category and chronology, of the literature content can be found on pages 14 and 15.

As mentioned above, it was clear from the literature review that contrary to much popular opinion and some academic writing (that has not been based on a substantial literature review) there have been a number of publications on NLP that are supportive of its use in schools and education in general. In contrast, there have been few critical publications (only six of which contain empirical research evidence).

The majority of research papers and perspectives contain discussions about the use of NLP in classroom practice that result in a positive conclusion. Within these, there is a strong emphasis on the use of influential language patterns, awareness of using all sensory modalities in teachings and some discussion on the use of anchoring (see for example: Burton, 2004; Helm, 1991; Raja and Tien, 2009; Stanton, 1998; Tosey and Mathison, 2003; Thalgott, 1986)\*. There is also an emerging literature on NLP and emotional, social and behavioural difficulties (Beaver, 1989; Bull, 2007; Esterbrook, 2006; Renwich, 2005; Squirrel, 2009)\* and a growing number of publications on language and learning in general (e.g. Eckstein, 2004; Marcello, 2003; Mathison, 2004; Mathison and Tosey, 2008c)\*.

Other notable strands of research include the use of NLP in leadership and leadership development (Churches, R. and West-Burnham, 2008; Hutchinson, Churches and Vitae, 2006; 2007; 2008; Young, 1995)\*, strong and robust research into metaprogrammes and learning (Brown, 2002; 2003; Brown, 2004; Brown and Graff, 2004)\* and perspectives on the use of NLP as a formal research methodology (Mathison and Tosey, 2008a; Mathison and Tosey, 2008b; Steinfield, T.R. and Ben-Avie, 2006)\*. Other areas where multiple positive studies have taken place include: creativity and self-expression (Beeden, 2009; Ronne, 1998; Winch, 2005)\* and NLP and e-learning (Ghaoui and Janvier, 2009; Sheridan, 2008; Zhang and Ward, 2004)\*.

There have been studies that have looked at modelling (Day, 2008)\*, the use of NLP with parents (Brandis, 1987; De Mirandi *et al.*, 1999; Hall *et al.*, 2005)\*, NLP in higher education (Skinner and Croft, 2009)\* and teacher professional identity (Dragovic, 2007)\* and



2008 saw the First International NLP Research Conference at Surrey University (see Tosey (ed), 2009). Our literature review also identified original university based research supporting the use of the NLP 'visual' spelling strategy (Loiselle, 1985; Malloy, 1987; Malloy, 1989; Malloy, 1995)\*, an area of NLP which is sometimes seen as controversial and which critics occasionally claim that there is no research evidence to support.

Only a small number of papers, from the 1980s, contain formal research evidence that is critical (Bradley, 1986; Cassiere and And, 1987; Fremder, 1986; Schleh, 1987; Semtner, 1986)\*. Furthermore, the methodologies used in these are open to dispute – in most cases because of inaccurate application/interpretation of NLP techniques (see the extended literature review in the appendices for a discussion). This said there was also a wide variation in the quality of the methodologies applied in some of the confirmatory studies. However, so far, no critical education papers (since the 1980s) contain research evidence-based criticism that is the result of actual research studies and those critical papers and academic comments that do exist confine themselves to theoretical discussions and perspectives (Burton, 2007; Craft, 2001; Lisle, 2005; Marcus, J. and Choi, 1994)\*. Wider criticisms of NLP although not specifically related to education (e.g. Heap, 1988; 2008; Roderique-Davies, 2009) are also discussed in the full review.

Most papers, as well as containing positive perspectives, contain supportive assertions in relation to findings (both qualitative and quantitative). This said the intention of the review (as is noted above) was not to carry out a full critical appraisal of the evidence as such but rather to document for the first time the full scope of the current literature. Looking across the literature several things became clear. Firstly, there is a tendency for NLP research papers to be self-referential, and especially not to reference earlier studies – perhaps because of the assumption that there is little other research. Furthermore, what is considered evidence of impact or a positive finding varies considerably, as does the depth and rigour of the evidence presented.

Again, we did not seek to limit the review to specific traditional domains within education (such as classroom practice). We took the view that, at this early stage in NLP's journey as an area beginning to be critically appraised and researched, it was more important to provide a map of the areas which could be of most interest to education researchers and others interested in this field of study. For this reason, and those discussed in more detail later, this review should only be considered to represent a preliminary set of findings. Despite these limitations we hope that the review will help future researchers to reference extant studies and perspectives, and to extend critical appraisal of these areas.

**The full research paper, with Appendices, can be accessed on the CD-ROM.**

### 3. Background to the teacher-led action research case studies

*“The approach used was that the teachers should learn NLP by experience.”*

The origin of the research was an initial project instigated by John Carey (then Senior Inspector for Education in Durham Local Authority). This project, called the Durham Project, developed and delivered an NLP in Education learning programme with John and Kate Benson of META (an NLP training company) (for a report of this project see meta4education, 2006). The training covered some basic NLP approaches and techniques with 30 teachers, teaching assistants and authority advisory staff.

Following this (in 2008) John Carey secured funding from the Training and Development Agency for Schools (TDA) for a further round of NLP-based professional development. It was from this later project that all but one of the teachers involved in this case study research were drawn, the other teacher having taken part in a separate 'Leading Thinking' Continuing Professional Development offer to schools in Northumberland. All schools that took part in this project had demonstrated previous commitment to developing new and innovative ways of enabling and facilitating thinking for learning.

Each school nominated two teachers who would be willing to work together to build on their current understanding and practice by developing new attitudes, learning some new skills and undertaking a small-scale work-based learning project about the impact of those skills on the children in their care. None of the teachers involved had any prior experience of NLP. Thanks to financial support from the TDA, all participants were able to take part at no charge, with a bursary to support supply costs, coaching, co-coaching opportunities, and practitioner research activities.

The four-day programme was arranged as follows:

- On the first two days, staff learned some basic NLP, and designed their research.
- They then undertook some initial research.

- During this time they also had access to a one-to-one coaching session with their course tutor.
- On the first morning of the second two days they reported on their findings, and during the rest of the time learned some more NLP skills.
- Teachers then wrote up their findings and those who wished went on to apply for professional recognition through the General Teaching Council for England (GTCE)'s Teacher Learning Academy.

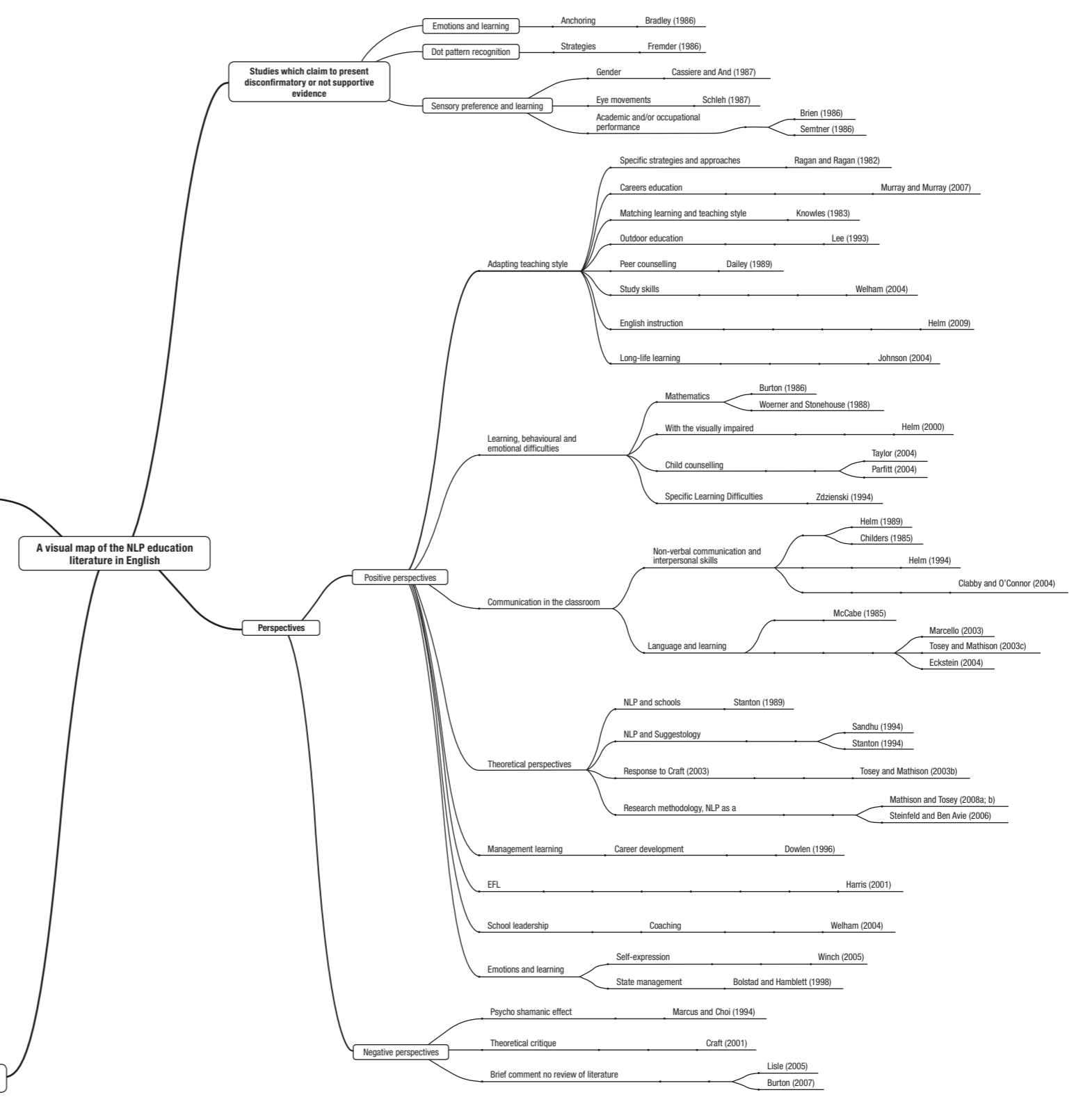
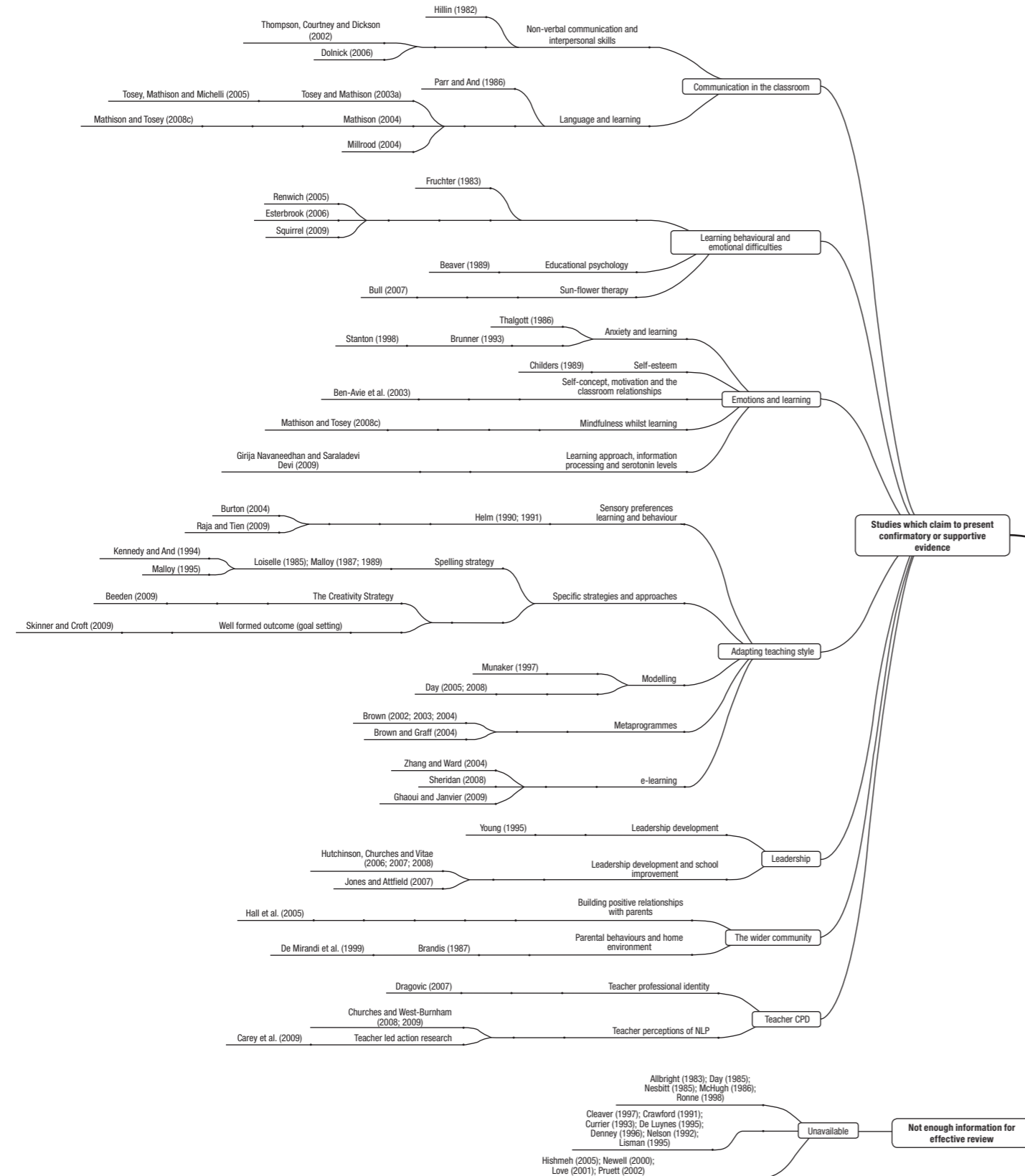
The approach used was that the teachers should learn NLP by experience. Whilst there was some common curriculum content (see below) the emphasis was on participants gaining a personalised experience of NLP in practice. The principal teaching approach was to model NLP practice, and coach each individual participant as they developed their knowledge, understanding and skills. Hence, although the 'curriculum' was the same for each of the three cohorts, the order of the content delivered was different, as was each cohort's learning experience.

All participants experienced the following aspects of NLP:

- NLP Defined
- NLP Assumptions
- Well formed outcomes
- Eye accessing cues
- Modalities and Submodalities
- Anchoring
- Rapport – particularly through language
- Meta model questioning
- Milton model
- State management of self and others

For a general introduction to NLP in teaching see for example Churches and Terry (2007).

Map of the reviewed literature (Carey et al., 2009) – showing research strands, topics and chronology





## 4. Methodology

“The Teacher Learning Academy is an innovative way of helping teachers improve their classroom practice – and gain professional recognition, at a national level, for doing so.”

The design of the project was informed by the twin aims of helping teachers who had been involved in Northumberland Local Authority's 'Thinking for Learning' programme a few years ago to see how they might spread these approaches amongst colleagues and schools, and at the same time develop their professional influencing abilities using NLP. Both NLP and the 'Learning for Thinking' programme focus on the ways in which learning happens as a social process. The project encouraged participants to test, particularly, the use of influential language to see if such approaches helped to ensure that the children and young people involved were able to make and understand meaning and, as a result, were motivated to explore and learn more. John Carey and Robert Peers (Northumberland Local Authority) were keen to see if a marriage of NLP and such approaches could create a multiplier effect, stimulating the careers of the teachers and leading to further gains in children's learning.

One of the issues that frequently arises for teachers applying more experiential learning and active learning in the classroom is the greater demand placed on creating positive behaviour and a consistent emotional climate in which children feel safe and able to experiment and learn effectively. Evidence from the literature and the CfBT research by Richard Churches and John West-Burnham (Churches and West-Burnham, 2008)\* suggested that NLP has much to offer in providing teachers with practical ways to improve their interpersonal skills as well as their intrapersonal (self and emotional management) capacities. Alongside this, there is evidence that NLP can be effective with individual children, and several of the teachers in this research applied their learning to the social, emotional and learning skills development of individual learners (see e.g. Bull, 2007; Childers, 1989; Renwich, 2005; Squirrel, 2009 for other examples in the literature)\*. Finally, the training was targeted at pre-threshold teachers out of a desire to encourage distributed leadership. A first cohort was drawn from schools where this approach to leadership was evident in existing practice. The second cohort was created by open enrolment.

All participants were required to undertake a small-scale action research project, and to write up the outcomes of that project as an account of practice. To ensure a consistent approach, we chose to use the General Teaching Council of England (GTCE)'s Teacher Learning Academy (TLA) framework (GTCE, 2008a; 2008b) as a process structure. This meant that, should the teachers wish, they could submit their write-up to the TLA for professional recognition of their work. So far three teachers have submitted their work and achieved accreditation at Level 1. One teacher has taken this further and is currently engaged in a Masters programme at the University of Newcastle that is focused on the theory and practice of NLP in the primary classroom.

### CfBT Education Trust and the Teacher Learning Academy

CfBT Education Trust was closely involved in the development of the TLA framework. More specifically, Dr Jeff Jones, Principal Consultant, CfBT Education Trust, helped develop and deliver the TLA verifier training materials.

The stated aims of the Teacher Learning Academy are as follows:

*The Teacher Learning Academy is an innovative way of helping teachers improve their classroom practice – and gain professional recognition, at a national level, for doing so. By encouraging teachers to try new techniques or different approaches, it leads to higher standards of teaching and a wealth of new ideas that can be shared across the school, and beyond.*

(GTCE, 2008a: 2)

To participate in the TLA individual teachers select a learning focus for study and research. They then look at research in their chosen subject area and work with a coach to plan a learning journey. This involves writing a proposed subject area focus, how they will research and what they think that they will find. They then apply their research focus and test their hypotheses sharing what they have

learned with their coach and other teachers. At the end of the process, teachers reflect on their practice and submit a TLA project and their findings. TLA verifiers carry out assessment and there are different levels of accreditation – with more advanced projects (Stages 3 or 4) being able to help teachers to achieve a Masters in Education (M.Ed) or the new Masters in Teaching and Learning.

A recent research evaluation of the TLA framework suggested that self-initiated, individualised CPD not only has an impact on individual careers but also has clear benefits for the wider school (Lord *et al.*, 2009).

*For teachers, improvements or developments in their teaching practice and an enhanced capacity to reflect on practice were cited and evidenced most often. Actual professional or career development, developments in knowledge and understanding, developments in teachers' confidence and access to resources and materials were also frequently evident.*

(Lord *et al.*, 2009: v)

This level of impact was also clear in the teacher case studies detailed below. At Stage 1 of the TLA, the intention is that teachers have an impact on what happens in their own classroom, while at Stage 2 the teachers' work is expected to impact on other colleagues. The expectation at Stages 3 and 4 is that impact will be felt on the school, on other schools, and on the wider professional community.

### Limitations of the study

As a group of researchers with experience across a spectrum of qualitative and quantitative methodologies (e.g. from action research through to clinical experimental research into Vitamin D synthesis) we are aware of the limitations of this form of action research, and the criticisms that this type of teacher-led practitioner enquiry can be subjected to. In any research context it is important to avoid the risk of over-generalisation and this is perhaps particularly true in the case of small-scale practitioner-led action research in education (as is noted by Morris, 2009). Furthermore, we accept that this research was carried out

over a relatively short time-scale and that in many ways the teachers who carried out the research were acting, in part, as 'interested parties' in that they were able to choose areas of study for themselves based on their personal enthusiasms for a particular area or areas of NLP that they had learned about.

We do, however, believe that the use of the Teacher Learning Academy framework as a starting point for this sort of research, is at least a partial and appropriate response to the criticism that practitioners can sometimes engage in research without sufficient familiarity with research methods (Carr and Kemmis, 1986). Several of the teachers have so far gained TLA accreditation and a number of others are beginning the process. We acknowledge the debates that have existed for many years around action research generally as a process (Lewis, 1987; Winter, 1987) and particularly the criticism that it can lead to a lack of self-critique (Gibson, 1985). We also accept that there are very different theoretical perspectives on what is and what is not action research (e.g. Elliot, 1981; McNiff, 1988; Noffke and Somekh, 2009; Zeichner, 1993) and that we have in many ways taken the simplest and least complex stance on the usefulness of practitioner-enquiry (Mills, 2003), recognising that the range of approaches and styles of research in this area make it difficult to judge the relative quality of findings (as is noted by Whitehead and Lomax, 1987).

In spite of the above we maintain that there is a strong rationale for documenting some small-scale teacher-led studies in the context of CfBT Education Trust's ongoing use of and interest in the area of NLP, particularly as a next step on from the successful pilots and post-event evaluations on the Fast Track teaching programme (Churches and West-Burnham, 2008; 2009)\*. Churches and West-Burnham's paper gave a broad perspective on teacher views about how NLP could be useful. This paper therefore sought to take this understanding further by evaluating the benefits as perceived by a group of teachers in their classrooms and over a more extended time period.

In essence therefore this publication claims to show evidence of teachers' perceptions of

the results of applying NLP in practice. It is of interest precisely because we have asked the teachers to tell their stories in a way that other teachers will appreciate and can identify with. It does not in any sense claim to prove that NLP works per se. We also acknowledge that there is no independent validation of the teachers' own findings. However, we believe

that there is now sufficient evidence for further study and particularly studies which involve larger groups of children and which more effectively control for a number of potentially confounding and/or undermining variables – so that findings can be more easily and confidently applied to wider contexts.

## 5. Teacher evidence in the 24 case studies – a summary

*“Through our discussions we have observed that NLP enables students to engage and contribute usefully to lessons.”*

The complete case study write-ups can be found on the accompanying CD-ROM, or if you are accessing the pdf version of this research in the [appendices](#). Those readers who are unfamiliar with some of the personal development and therapeutic techniques taught in NLP training may find it helpful to first read the [Glossary](#) at the end of this section which describes the specific areas discussed in the research. Readers who wish to explore NLP terminology in more detail may want to refer to Churches and Terry (2007).

Teachers were given a choice as to which parts of the NLP training they focused on for their case study write-ups. However, as is noted above, all the teachers were trained in a number of areas of NLP and most made use of a wider range of learning than has been included in the actual research. Most teachers focused on whole classroom evidence, others on individual children, and a few of the case studies contain evidence for both. For a summary of the different school contexts and areas of reported beneficial impact see the table below (pages 24–26).

Some case studies targeted an evaluation of a single technique (e.g. [Case Study 3](#) by Rachael Coull which focused on the use of anchoring) whilst others looked at the effect of a wide range of areas – as in the case study by Simon Potter ([Case Study 2](#)) which discusses: anchoring, meta model questioning, Milton model language patterns, non-verbal communication, rapport, submodalities and the use of the well formed outcome process.

Teachers were positive in their comments across the full age range from Nursery classes to Year 13 students. There is also a spread of contexts from small rural primary school to large urban secondary school. Although there are some variations in the extent to which teachers found training in NLP useful, all of the case studies below indicate evidence in relation to either the development of interpersonal skills (the ability to communicate with and influence others) or intrapersonal

capacity (self-management, personal capacity and the management of emotions).

In many cases teachers have also reported significant change in the behaviour of both individual children and classes. Even where one teacher had been unable to note specific effects on class behaviour (such as in [Case Study 8](#) by Stephanie Kidd) they still nonetheless were able to identify improvements in their own feelings about their capacity to deal with classroom situations. Typical commentary includes things such as the following by Joanna Dobson and Helen Fuhr:

*Through our discussions we have observed that NLP enables students to engage and contribute usefully to lessons. Students have been able to explain themselves more clearly and are able to problem solve and bring themselves to suitable and workable solutions through guidance and communication with the teacher. There has been a significant improvement in the levels of confidence shown by pupils in the classroom and this has led to increased motivation which has manifested itself both in improved contribution and work rate in class and improved quality of homework.*

Joanna Dobson and Helen Fuhr,  
St Benet Biscop High School

As well as enhancing learning and behaviour in the classroom a number of the teachers reported benefits to their wider professional development, coaching skills and development as leaders. For example, Julie Newton ([Case Study 12](#)) writes that:

*... it has enabled me to extend my knowledge and understanding of leadership, including how to use language to positively influence and motivate people and contribute to their wellbeing. And finally, it has helped me in both my professional and personal life by introducing me to useful strategies to experiment with when faced with situations that I find challenging.*

Julie Newton, Corbridge First School



“Once a week we have a circle time for ‘Star of the Week’, when a magic balloon with someone’s name is passed around for the children to put all of their good thoughts in.”

Although a small number of the teachers felt that they needed more time to evaluate the impact fully (e.g. [Case Study 16](#)) nonetheless they were still able to report initial and immediate benefits. Some like Mark Phillips ([Case Study 9](#)) reported significant impact suggesting that he ‘can understand the children I teach on a whole new level’. Similarly Janice Woods ([Case Study 20](#)) reported that ‘the impact of the support received has been phenomenal and life changing’.

Benefits in relation to the use of anchoring (an element of NLP which is described in NLP training as being related to the notion of classical conditioning (Pavlov, 1927)) as a way of giving covert classroom management instructions (e.g. always using the same piece of music to indicate the time to tidy up) are discussed in the case studies by Michell Whall ([Case Study 4](#)), Stephanie Kidd ([Case Study 8](#)), Tracey Burns ([Case Study 14](#)), Louise Lightley ([Case Study 18](#)) and Nigel Maddison ([Case Study 19](#)). Tracey Burns, in particular, took her use of anchoring further to support creating the right learning environment and writes that:

*Once a week we have a circle time for ‘Star of the Week’, when a magic balloon with someone’s name is passed around for the children to put all of their good thoughts in. The balloon then gets so full of good thoughts that it bursts and the name of the ‘Star’ comes out. I choose a piece of music to play so that when the children come in from lunch and hear it they know that they don’t sit in their usual place on the carpet but make a circle on it, very quietly, ready to find out who the new star is. This works really well, I don’t need to say a thing and it is wonderful to see.*

Tracey Burns, Mowbray First School

Rachael Coull, in another case study on the use of anchoring, discusses the extensive use of a range of spatial anchoring techniques, to enhance teacher presentation skills. Nicola Hurst ([Case Study 11](#)) further discusses such approaches and writes that:

*Spatial anchoring has exceeded my expectations regarding how well it has worked. My classroom is calmer and more settled without the need to raise my voice to get pupils’ attention and I no longer get a*

*half-hearted response when I want them to halt their activities.*

Nicola Hurst, Northburn Primary School

As far as we are aware from our literature review, the evidence across these case studies represents the first of its kind in relation to the use of anchoring to manage behaviours in the classroom and in relation to whole class ‘conditioning of responses’. Although, the use of signals for attention frequently appears in behaviour management training, NLP appears to offer significant insights into the need to be consistent in relation to the stimulus used, its context and the potential of associating that stimulus with a particular emotional state rather than just behaviour.

Anchoring with individuals to help children manage their feelings and emotions (by, for example, making use of positive past experiences and associating them with a future action) is also discussed in [Case Study 12](#) by Julie Newton and [Case Study 21](#) by Erica Tait. Several specific examples of impact appear in Erica’s research, for example she writes that:

*Anchoring has enabled child A to express her emotions much more at home, and has given her the confidence to tackle new or uncomfortable situations in a positive way as opposed to how she coped before. Child B is now much more aware of his own capabilities and is much more engaged at school.*

Erica Tait, Malvins Close First School

In particular, [Case Study 5](#) (by Joanna Dobson and Helen Fuhr) notes the benefit of using anchoring to support the alleviation of test anxiety – an application of NLP also supported in the literature (see e.g. Stanton, 1998)\*.

The impact of paying attention to non-verbal communication (such as voice tone and body language) are discussed in [Case Study 4](#) by Michell Whall. Gillian Hogg ([Case Study 10](#)) similarly points to the benefits of such approaches in relation to the enhancement of relationships with other members of staff as well as children, and makes specific reference to the benefits of developing sensory acuity and the observation of eye accessing cues (an area of NLP which is beginning to attract

“It has demonstrated to me that the use of simple but effective questioning techniques can dramatically affect the behaviour and attitude of pupils.”

more robust research than in the past (see Diamantopoulos, Woolley and Spann, 2009)\*.

The use of influential language patterns to support both learning and behaviour is viewed consistently as having had an impact. As in the literature review evidence, the benefits of understanding the structure and use of influential language patterns and suggestion, as derived from studies of hypnosis and therapy (known as the Milton model in NLP), emerged across most of the case studies. Some of the research (such as [Case Study 1](#), by Fiona MacGregor and Robin Charlton) indicates wider benefits as well as usefulness in the classroom.

In relation to learning and teaching there is evidence of positive behaviour change with children in the case studies by Simon Potter ([Case Study 2](#)), Joanna Dobson and Helen Fuhr ([Case Study 5](#)), Nina Blanchet ([Case Study 6](#)), Emma Volpe ([Case Study 7](#)), Stephanie Kidd ([Case Study 8](#)), Mark Phillips ([Case Study 9](#)), Gillian Hogg ([Case Study 10](#)) and Emma Loader ([Case Study 24](#)). The case study by Laura Holland ([Case Study 13](#)), for example, records the impact that she suggests that even very small changes in language can have. Other teachers have noted the effect that using, for example, influential language and other NLP techniques for state management has had on themselves as well as on the children that they teacher. Louise Causer in [Case Study 16](#) writes:

*... the effect upon my teaching and classroom management is significant and I can now create the way I want to feel using designer states. I am more relaxed and confident in class and as a result the children appear more settled and thus we had a more positive environment.*

Louise Causer, Coulson Park First School

There is evidence of impact in relation to the use of influential language one-to-one with previously challenging students. Jaqueline Lorimer ([Case Study 22](#)) integrated both Milton model and meta model questioning work with anchoring, non-verbal communication and visualisation to bring about significant change for one particular student. In her case study she reports that she is:

*... delighted with the results of my efforts and am fascinated by the power of NLP. Based on the difference I have been able to make to this child’s learning, I am certain to use and develop these techniques with many others in the future.*

Jaqueline Lorimer, Broomley First School

NLP language applied in a coaching context to the classroom similarly resulted in examples of impact that are discussed by Gillian Hogg in [Case Study 10](#). As well as having been shown to have a impact in the classroom positive influential language patterns were used by Ian McDuff to support the mentoring of challenging students in a pastoral context ([Case Study 15](#)). Ian found that:

*It has demonstrated to me that the use of simple but effective questioning techniques can dramatically affect the behaviour and attitude of pupils. Seeing the success with an individual pupil over a period of 3 days, I continue the use of positive questioning within the classroom environment. It continues to demonstrate a powerful means of influencing pupil behaviour and attitude.*

Ian McDuff, Astley Community High School

Diane Murphy, in [Case Study 23](#), reports similar findings.

One piece of research sought to apply the concept of eye accessing cues and the notion of visual spelling strategy to the teaching of reading. In doing so Zoe Ryan ([Case Study 17](#)) reported benefits in applying this strategy to children who previously had limited flexibility and a largely ineffective phonetic approach to reading, findings which parallel the research evidence into visual spelling and eye accessing cues at De Moncton University in Canada and at the University of Utah (see Loiselle, 1985; Malloy, 1987; 1989; 1995)\*. Janice Woods ([Case Study 20](#)) reported similar findings, in relation to the NLP Spelling Strategy and writes that:

*The impact on pupils in terms of their learning and behaviour has been brilliant. The child I used as my research target improved her spelling ability and became more confident.*



“A number of case studies make use of visualisation and/or the well formed outcome process to help improve student motivation and learning.”

She began to use the way she recalled her spellings to help her remember other areas of the curriculum and her parents were very pleased with her progress.

Janice Woods, Bedlington West End First School

A number of case studies make use of visualisation and/or the well formed outcome process to help improve student motivation and learning (e.g. Case Study 7 by Emma Volpe, Case Study 9 by Mark Phillips and Case Study 21 by Erica Tait). Joanna Dobson and Helen Fuhr (Case Study 5) describe using an NLP-derived reward strategy to support a gifted and talented student who was not making progress. Joanna Dobson and Helen Fuhr (Case Study 5) used a relaxation visualisation to help with examination and anxiety as well as general class behaviour and one teacher found the use of visualisation activities to support memory useful (see Case

Study 9 by Mark Phillips). Extending and enhancing the use of visualisation with several other NLP techniques, Julie Newton (Case Study 12) describes how she successfully combined visualisation, anchoring and storytelling to create an effective classroom climate at the beginning of lessons. As well as the well formed outcome process, Mark Phillips (Case Study 9) made use of submodalities in his research, finding benefits in combining NLP techniques. Gillian Hogg (Case Study 11) also made use of submodalities and in Case Study 10 discusses their use as a way of improving recall (when used in memory visualisations) with Year 13 students. The benefits of submodality work can similarly be found in Erica Tait’s study (Case Study 21).

None of the teacher reported negative effects or issues as a result of making use of the NLP approaches that they had been taught.

Table 1: Summary of the teacher-led action research case studies

Case Study	Title	Teacher/s	School	Phase	Areas of NLP which were evaluated and which the teachers described as having had specific positive impact*	Example from teacher's view of impact
1	Confidence and Attitudes	Fiona MacGregor/ Robin Charlton	Stobhillgate First School	Primary	Well formed outcomes Visualisation Submodalities Storytelling and metaphor Spelling strategy Sensory acuity Relationship rewards Rapport Non-verbal communication Milton model language Meta model questioning Eye accessing cues Anchoring	‘Both teachers recognised that they have become more observant of other people’s behaviour and language, and this has led to more reflection on their own actions and language.’ ‘As a result of this sort of training I now feel that I understand the children I teach on a whole new level, and can engage them at their level more effectively.’
2	Improving Attainment	Simon Potter	Tweedmouth Community Middle School	Middle school		‘Throughout the project there has been a great positive impact on the staff and children. Routine tasks throughout the session are carried out in a more focused manner...’
3	Improving Behaviour	Rachael Coull	Northburn Primary School	Primary		‘My classroom practice has changed considerably since the NLP techniques are easily applied and become natural behaviour very quickly. The impacts were quick, and plain to see.’
4	Influencing Behaviour	Michell Whall	Astley Community High School	Secondary		‘NLP has made us more conscious of the words we use when talking to students ... positive reinforcement and positive, encouraging language has been extremely successful...’
5	It’s Good to Talk	Joanna Dobson/ Helen Fuhr	St Benet Biscop High School	Secondary		‘I have particularly enjoyed using the ‘Teaching Influence’ cards and have been amazed at the impact they have had.’
6	Language Patterns at Work	Nina Blanchet	Sele First School	Primary		‘There is no doubt that over the course of a few weeks a more positive learning environment was created as a result of the project’
7	Middle School – Language	Emma Volpe	Allendale Middle School	Middle school		‘Children seem to be more willing to try if I invoke their curiosity and embed in them the belief that they can achieve – and already have achieved.’
8	More Positive	Stephanie Kidd	Coulson Park First School	Primary		

Table 1: Summary of the teacher-led action research case studies (continued)

Case Study	Title	Teacher/s	School	Phase	Areas of NLP which were evaluated and which the teachers described as having had specific positive impact*											Example from teacher's view of impact		
					Anchoring	Eye accessing cues	Meta model questioning	Milton model language	Non-verbal communication	Rapport	Relationship rewards	Sensory acuity	Spelling strategy	Storytelling and metaphor	Submodalities	Visualisation	Well formed outcomes	
9	Motivation and Facilitating Access	Mark Phillips	Tweedmouth Community Middle School	Middle school	●		●								●	●	●	'I have noticed a lot more responses from children who have struggled to address the curriculum, and children with motivation issues. Some children have also accessed some of the NLP skills to develop personally.'
10	Noticing and Coaching	Gillian Hogg	Duchess's Community High School	Secondary		●												'... when I took the time to use language in a more considered and constructive way, the effect on students was at times almost instant...'
11	Positive Attitude	Nicola Hurst	Northburn Primary School	Primary	●													'My classroom is calmer and more settled, without the need to raise my voice to get pupils' attention.'
12	Ready to Learn	Julie Newton	Corbridge First School	Primary	●								●			●		'Children are much calmer, focused and receptive to learning at the start of whole class sessions...'
13	Small Change, Big Impact	Laura Holland	Mowbray First School	Primary				●										'... impacted on all children with regard to their motivation and pride in how they responded and presented their work.'
14	Sounds Good	Tracey Burns	Mowbray First School	Primary	●													'This [anchoring] works really well. I don't need to say a thing and it is wonderful to see.'
15	State and Language 1	Ian McDuff	Astley Community High School	Secondary				●										'On returning to school, pupil X has become a more confident person... He appears to have lost a lot of his negativity with regard to school. His attendance level has also improved.'
16	State and Language 2	Louise Causar	Coulson Park First School	Primary	●			●										'... the most significant aspect of my research work was positive talk. This whole area had the most effect both on my own teaching and on the children's learning.'

Table 1: Summary of the teacher-led action research case studies (continued)

Case Study	Title	Teacher/s	School	Phase	Areas of NLP which were evaluated and which the teachers described as having had specific positive impact*											Example from teacher's view of impact		
					Anchoring	Eye accessing cues	Meta model questioning	Milton model language	Non-verbal communication	Rapport	Relationship rewards	Sensory acuity	Spelling strategy	Storytelling and metaphor	Submodalities	Visualisation	Well formed outcomes	
17	Teaching Reading	Zoe Ryan	West End First School	Primary		●							●					'The findings from this research have influenced my approach to teaching reading in that it has shown how important it is to use a variety of techniques to include all learners.'
18	Thank You for the Music 1	Louise Lightley	Wansbeck First School	Primary	●													'There is a positive atmosphere within my classroom and I feel that this has helped the children and me to work effectively and happily.'
19	Thank You for the Music 2	Nigel Maaddison	Wansbeck First School	Primary	●													'Over time the pupils responded to their peers and all reduced the time it took them to be ready and settled.'
20	The Eyes Have It	Janice Woods	Bedlington West End First School	Primary		●		●					●					'This has been brilliant to use in the classroom as my children have responded very favourably and even parents noticed a change in the way children responded.'
21	Visualisation and Anchors	Erica Tait	Malvins Close First School	Primary	●										●			'As a teacher I have become a great deal more confident when dealing with difficult children or situations, and I believe this is solely due to the experience I have had using NLP methods.'
22	Wide Ranging Approach	Jaqueline Lorimer	Broomley First School	Primary	●		●	●	●									'He is now a much more confident boy who takes pride in his work. His alertness in class has greatly improved...'
23	Words that Work	Diane Murphy	Duchess's Community High School	Secondary				●										'... the vast majority of students have become much more motivated, attitudes have changed and engagement with the subject has increased.'
24	Yes, Yes, Yes	Emma Loader	Corbridge First School	Primary				●										'The class also seemed calmer and more certain of what was expected of them. As a result, I have started using this language pattern in my everyday teaching and am still reaping the benefits today.'

## 6. Wider benefits and impact of the project

“Schools reported wider benefits from using NLP in relation to improving the quality of teaching and learning for students.”

A key driver of the research project was the desire to facilitate teachers' reflective practice, and to share the learning derived from that reflection within and beyond their local education community. The design of the programme sought to develop a community of practice and participants were encouraged to co-coach in their school-based pairs, and to maintain contact with other members of the group. We believe that this proved to be a key contributor to the success of the project. In addition teachers were encouraged to use an online forum created specifically for members of the programme although they accessed this with varying degrees of commitment, and coaching and co-coaching face-to-face were generally perceived as being more beneficial.

Schools reported wider benefits from using NLP in relation to improving the quality of teaching and learning for students. This was not just because of the strategies themselves but also because the teachers using them became more effective champions, gaining confidence about their own skill and understanding. A number of participants consistently shared many of the techniques they learned (such as engaging and motivating students, effective communication skills, improved tutoring) with their peers in schools. Work has begun to demonstrate impact in relation to raising standards of achievement as well as on helping schools raise levels of emotional well-being in their staff and pupils.

The evidence in the case studies in combination with the experience of the trainers and coaches clearly suggests that this project had a significant impact for the teachers and the schools involved and in many ways can be said to have led to evidence at the sort of higher levels of teacher CPD that have been argued for by writers such as Guskey (1994; 2000) and others (Goodall, 2005). Specifically, Guskey (2000) suggests that the evaluation of impact can be viewed at five different levels:

1. participant reaction
2. participant learning
3. organisational support and change

4. participant use of new knowledge and skills
5. pupil learning outcomes

Frost and Durrant (2003) similarly argue that the outcomes of CPD should be seen not only in terms of professional development for individuals, but also in the extent to which there is an impact on pupils' learning, on colleagues' learning, and on organisational learning.

An important contribution made by Guskey is in helping to identify how educators can begin to focus on 'the bottom line' and what constitutes pupil outcomes (Level 5). Ideas that are being increased applied to education research (see Table 2, e.g. Earley and Bubb, 2004).

The most significant impacts are present where CPD has had an impact on pupil learning outcomes. Looking across the 24 case studies it is possible to identify elements of Level 4 and 5 impact across nearly all of the case studies with some demonstrating significant benefits in relation to pupil learning outcomes (particularly those which describe an individual student one-to-one case study) – see the table below on pages 28 and 29.

All of the case studies demonstrated levels of impact at one of the three highest levels (Organisational support and change (Level 3); Participant use of new knowledge and skills (Level 4); Pupil learning outcomes (Level 5)) with the vast majority demonstrating impact at Level 4, Level 5 or both of these. It was less common for the studies to show impact at Level 3; however, this may well have been because of the short timescales over which the research project ran. Also the project aimed to build a community of practice between the teachers in the various schools rather than in the schools themselves. This said, a number of the studies talk about the intention to move to engaging in school improvement at this organisational level in the near future.

We believe that this level of impact was the result of two factors:

- the nature of NLP as a set of strategies and techniques

Table 2: 5 Levels of Professional Development Evaluation – adapted from Earley and Bubb (2004)

<b>Level 1:</b> <b>Participants' reactions</b>	By evaluating <b>reactions</b> , you find out if participants enjoyed the training, if the training environment was suitable and comfortable, and if the trainers were capable and credible i.e. what did participants think and feel about the training?
<b>Level 2:</b> <b>Participants' learning</b>	By evaluating <b>learning</b> , you determine the extent to which trainers have changed participants' attitudes, and/or improved their knowledge, and/or increased their skills.
<b>Level 3:</b> <b>Organisation support and change</b>	By evaluating <b>organisation support and change</b> , you determine the success of the school in supporting any CPD efforts.
<b>Level 4:</b> <b>Participants' use of new knowledge and skills</b>	By evaluating <b>participants' use of new knowledge and skills</b> , you determine if the trainees are using or transferring the newly acquired knowledge, skills and behaviours in the job context i.e. what behaviour changed because people took part in the training?
<b>Level 5:</b> <b>Pupil learning outcomes</b>	By evaluating <b>pupil learning outcomes</b> , you focus on the 'bottom line'.

COGNITIVE	AFFECTIVE	PSYCHOMOTOR
<b>Performance and achievement</b> <ul style="list-style-type: none"> <li>• pupil attainment</li> <li>• knowledge and understanding</li> <li>• exam results, grades, test scores</li> </ul>	<b>Attitudes, beliefs and dispositions</b> <ul style="list-style-type: none"> <li>• changes in attitude</li> <li>• improved study habits</li> <li>• better predisposed towards subjects</li> <li>• better attendance</li> <li>• pupils' self-concepts greater</li> <li>• confidence as learners accept responsibility for actions and behaviours</li> </ul>	<b>Skills, behaviours and practices</b> <ul style="list-style-type: none"> <li>• classroom behaviour</li> <li>• homework completion rates</li> <li>• participation in activities e.g. lunchtime and after-school clubs</li> <li>• retention and drop-out rates</li> <li>• healthier eating habits</li> <li>• reading more outside school</li> <li>• more active in their learning</li> <li>• engaged more in classroom discussion</li> </ul>

- the structuring of the research within the TLA framework.

In particular, it is possible to note significant benefit to pupil outcomes in the areas of affective development, although there is some initial evidence in relation to improvements in attainment, knowledge and understanding. Specifically, there is evidence of impact in

relation to: positive changes in attitude, better predisposition towards subjects, improved self-concept and better acceptance of responsibility for actions and behaviours. There is also evidence for improved classroom behaviour, pupils being more active in their learning and more engagement in classroom discussion.



Table 3: Levels of impact in each of the case studies and examples from the teacher commentary

Case Study	Title	Evidence of impact at:					Examples of teacher commentary in relation to the highest levels of impact described
		Level 1 – Participant reaction	Level 2 – Participant learning	Level 3 – Organisational support and change	Level 4 – Participant use of new knowledge and skills	Level 5 – Pupil learning outcomes	
1	Confidence and Attitudes	●	●		●	●	'... this planned approach (before speaking) showed positive and mostly immediate benefits in the attitudes and beliefs of the pupils; additionally the teachers both became more reflective about their own practice.'
2	Improving Attainment	●	●		●	●	'The use of submodalities, and meta model questioning in an English lesson led to all pupils producing an excellent piece of creative writing using personification.'
3	Improving Behaviour	●	●	●	●	●	'The main benefit of this technique is that the children appear to calm down more quickly after an incident and through structured questioning and discussion, are able to resolve conflict.'
4	Influencing Behaviour	●	●		●	●	'The lesson progressed well and the pupils attained all the learning objectives set (unheard of for this class) since I did not have to repeat myself over and over.'
5	It's Good to Talk	●	●	●	●	●	'Our focus student has met all the objectives set out in the project. Her work rate and concentration have been consistently excellent and the level of work she has produced both in lessons and at home has been of a consistently high standard.'
6	Language Patterns at Work	●	●		●	●	'I was able to give examples of what I had done in the classroom, which my colleagues enjoyed and were able to relate to.'
7	Middle School – Language	●	●		●	●	'They were proud of their achievements and more engaged with the subject. It was particularly pleasing to hear this from male pupils as raising standards and improving motivation amongst boys was one of the key areas of focus...'
8	More Positive	●	●		●	●	'Although there have been no major differences ... there have been small yet significant changes. Children seem to be more willing to try, I invoke their curiosity and embed in them the belief that they can achieve – and already have achieved.'
9	Motivation and Facilitating Access	●	●	●	●	●	'... all the learning that has taken place has been really successful, and I know it will continue to be so as my practice develops, and we work towards a whole school approach to the use of NLP.'
10	Noticing and Coaching	●	●		●	●	'My main observed impacts on students were that when I took the time to use language in a more considered and constructive way, the effect on students was at times almost instant...'
11	Positive Attitude	●	●		●	●	'Spatial anchoring has exceeded my expectations regarding how well it has worked. My classroom is calmer and more settled without the need to raise my voice...'
12	Ready to Learn	●	●		●	●	'Children are much calmer, focused and receptive to learning at the start of whole class sessions and a quick wave of the magic wand is a great visual aid to remind the children of what is expected of them.'

Table 3: Levels of impact in each of the case studies and examples from the teacher commentary (continued)

Case Study	Title	Evidence of impact at:					Examples of teacher commentary in relation to the highest levels of impact described
		Level 1 – Participant reaction	Level 2 – Participant learning	Level 3 – Organisational support and change	Level 4 – Participant use of new knowledge and skills	Level 5 – Pupil learning outcomes	
13	Small Change, Big Impact	●	●		●	●	'I found I had a different child in my class, one who was motivated and eager to produce good work; and a child who took pride in what he did.'
14	Sounds Good	●	●		●	●	'... when the children come in from lunch and hear it they know that they don't sit in their usual place on the carpet but make a circle on it, very quietly, ready to find out who the new star is. This works really well, I don't need to say a thing and it is wonderful to see.'
15	State and Language 1	●	●		●	●	'Without the NLP training, my mentoring of pupil X would not have been as successful. It has demonstrated to me that the use of simple but effective questioning techniques can dramatically affect the behaviour and attitude of pupils.'
16	State and Language 2	●	●		●	●	'From a personal point of view the most significant aspect of my research work was positive talk. This whole area had the most effect both on my own teaching and on the children's learning.'
17	Teaching Reading	●	●	●	●	●	'... I have found it can have a significant impact on both my own and my pupils' understanding. I then plan to continue to disseminate my training within school.'
18	Thank You for the Music 1	●	●	●	●	●	'I have had the chance to observe the children closely throughout this research time and I believe there has been a significant change in their behaviours around the classroom.'
19	Thank You for the Music 2	●	●		●	●	'By using the music at a specific time a definite impact was made as the amount of time wasted at the end of the day was substantially reduced.'
20	The Eyes Have It	●	●		●	●	'The child I used as my research target improved her spelling ability and became more confident.'
21	Visualisation and Anchors	●	●		●	●	'Anchoring has enabled Child A to express her emotions much more at home, and has given her the confidence to tackle new or uncomfortable situations in a positive way as opposed to how she coped before.'
22	Wide Ranging Approach	●	●		●	●	'The meta model made it difficult for him to be defensive about his sleep habits and he was more open to suggestion as a result. He was able to give his own opinion and listen not only to mine but also to those of his peers.'
23	Words that Work	●	●		●	●	'The impact on the students has been significant – both on individuals and on classes as a whole. When I have applied the Milton model and Yes sets the vast majority of students have become much more motivated...'
24	Yes, Yes, Yes	●	●		●	●	'... the children were far more focused, the volume in the class was lower and the work they produced of a better quality.'

## 7. Summary and general conclusions about NLP and current thinking in education

“Many popular educational programmes claim to be ‘brain-based’, despite pleas from the neuroscience community that these neuromyths do not have a basis in scientific evidence about the brain.”

In relation to NLP being incorporated into teacher thinking and professional practice the genie is now well and truly out of the bottle. This has been particularly evident since over 2,000 training places in courses including NLP have been given to teachers as part of the Fast Track teaching programme (Churches and West-Burnham, 2008; 2009)\*. By the end of the programme (July 2009), nearly 1,000 of these involved the completion of an INLPTA (International NLP Trainers Association) accredited 30-hour training programme (approximately 1 in 170<sup>6</sup> of all teachers who were in their first 9 years of teaching in England). There is now, as well, an emerging strand of peer reviewed education research activity – see for example papers from the *First International Research Conference on NLP* at Surrey University in June 2008 (Beeden, 2009; Churches and West-Burnham, 2009; Squirrel, 2009)\*. The conference also included a number of poster sessions on completed or ongoing PhD research. This emergence of interest in research into NLP as a product, philosophy and/or in relation to the effectiveness of its practice is not however unique to education as is noted by Tosey and Mathison in the first critical academic appraisal of NLP (Tosey and Mathison, 2009) and by others (e.g. Wake, 2008).

We believe that the initial research evidence in our literature review and popular book review requires those involved using NLP in education to re-conceptualise what they do. In particular, it is important to avoid the so-called ‘neuromyth’ trap that other non-NLP applied thinking about the brain, mind and learning has fallen into in recent years (see the evidence from the All-Party Parliamentary Group on Scientific Research in Learning and Education for a discussion of the challenges (Institute for the Future of the Mind, 2007; TLRP, 2007)). Geake, for example, notes that

*Many popular educational programmes claim to be ‘brain-based’, despite pleas from*

*the neuroscience community that these neuromyths do not have a basis in scientific evidence about the brain.*

(Geake, 2008: 123).

Specifically, Geake (2008) is critical of VAK learning styles, left and right-brain thinking, multiple intelligences and the idea that we only use 10% of our brain some of the time.

Such conflicts between the scientific community and practitioner activity arise in teacher pedagogy, in part, because of inaccurate use of terminology in teacher continuing professional development and training, lack of research evidence and poor application. It is essential to ensure, where appropriate, a better alignment with the scientific literature on learning and its language (see e.g. Blakemore and Frith, 2005; Geake and Cooper, 2003; Geake, 2005). Bearing in mind, of course, that new evidence is always emerging, as is demonstrated by the more recent evidence about visual and verbal cognitive style and brain functioning (Kraemer, Rosenberg and Thompson-Schill, 2009) discussed in the extended literature review. For a fuller discussion about VAK and the use of these terms in NLP see the final section of the extended literature review (in the appendices or on the CD-ROM.)

In the case of a number of NLP approaches there appears to be growing evidence to support its impact and/or at least the perception of its effectiveness. Whether the reasons for that effectiveness are described in the right way is perhaps the issue. For example, we believe that the qualitative research evidence suggests that there is much that is useful to schools in relation to understanding the nature of influential language as defined by some NLP writing. Teachers have clearly found this useful to

“NLP offers valuable insights in a technical sense on the psychological skills for understanding and influencing people.”

influence behaviour and learning in more positive ways whilst preserving the emotional climate in their classrooms. It would be a pity to lose this body of knowledge because of poor theoretical explanations about how this works and what is going on when such approaches are applied. If NLP is to avoid criticism from the same perspectives as those discussed above several things are going to need to happen.

- Firstly, there is a need to seek further research evidence of impact and critical review.
- Secondly, NLP education practice, as it develops, will need to begin to challenge its use of terminology and the way in which it talks about what it is doing and is seeking to achieve – so that it aligned more effectively with the scientific evidence.
- Thirdly, greater conceptual clarity around NLP research and research methodology needs to emerge. In particular, it is clear that research into NLP needs to be appropriately NLP informed and based on a full understanding of the content of NLP and the academic literature.
- Finally, some theoretical elements and explanations of the NLP model may well need to be dropped in the future as research evidence develops.

So is there an argument against NLP being taught to teachers before there is more research evidence? At the end of the day, a balance needs to be struck between evaluation and innovation. Many practices exist in education that would appear to have no evidence base – including, for example, the use of Powerpoint. What is to be encouraged is the use of innovations such as NLP by teachers and learners within a reflective approach to practice.

We believe that NLP, as is illustrated in the case studies in this research, offers a wide range of opportunities for teacher leadership as described by Harris and Muijs (2004). NLP requires ongoing critical reflection and evaluation to be implemented effectively and as a natural ‘community of practice’, appears to offer opportunities for higher level impact teacher continuing professional development

– such as that noted by a number of writers (e.g. Goodall *et al.*, 2005; Hargreaves, 1994; Hopkins and Harris, 2001; Guskey, 2000). Such factors suggest, in our view, that NLP has significant potential in relation to the implementation of practices that aim to create a Development and Research culture (Morris, 2004; Desforges, Morris and Stanton, 2005).

In discussions about school leadership and NLP, Churches and West-Burnham (2008; 2009)\* suggest that NLP has the potential to support the development of interpersonal behaviours and intrapersonal capacity (West-Burnham, 2004; West-Burnham and Ireson, 2005), personalisation (de Freitas and Yapp, 2005; Leadbeater, 2004; West-Burnham and Coates, 2005) and the importance of maintaining an effective emotional climate. These ideas appear to have been, at least partially, confirmed in the literature survey and in a number of the case studies in this paper. It is perhaps not too strong to suggest that NLP appears to offer a reflective framework in which to take emotional literacy ‘seriously’ alongside the sort of ‘learning to learn’ approaches described by writers like MacGilchrist and Buttress (2005). In relation to wider notions of organisational development, NLP has been strongly associated with systems intelligence (Hämäläinen and Saarinen, 2004) and systems thinking at the University of Helsinki. Turunen, for example argues that:

*NLP offers valuable insights in a technical sense on the psychological skills for understanding and influencing people. Hence... NLP offers tools and practices for anyone to stimulate their SI [system intelligence]*

(Turunen: 257).

As such, some elements of NLP may offer further potential in developing the skills of system leaders as defined by Fullan, Hopkins and others (Hargreaves, Halász and Pont, 2008; Hopkins, 2009; Hopkins and Higham, 2007; Fullan, 2005a; b; O’Leary and Craig, 2007; Pont, Nusche and Hopkins, 2008). Preliminary evidence from its use on the Fast Track teaching programme (Churches, Hutchinson and Jones; Churches and West-Burnham, 2008\*; 2009\*; Jones and Attfield, 2007\*) and as part of the Consultant Leader

<sup>6</sup>There were 173,700 serving teachers in Years 0–9 of teaching in March 2005 in England. Source: DfES annual 618G survey and Database of Teacher Records (DfES, 2004).

Programme (the forerunner to the National Leaders of Education initiative (see Hopkins, 2009)) appears to support this (Hutchinson, Churches and Vitae; 2006; 2007; 2008)\*.

Finally, bearing in mind the recent evidence of the relevance of certain aspects of emotional intelligence to attainment (Rodeiro, Bell and Emery, 2009) and the apparent impact on the affective dimensions of learning that are

indicated in the case studies, and across much of the literature review, there would appear to be benefit in teaching elements of NLP to teachers and indeed to children. Specifically, teachers in this study reported benefits that may offer ways to support those students who are struggling in the areas of self-motivation and the control of impulsivity (both of which were identified as significant for attainment by Rodeiro, Bell and Emery, 2009).

## 8. Recommendations for further research

“*Research consistently shows that what teachers do in the classroom is at the heart of school effectiveness and that classroom practice is the factor that most influences children’s progress (Muijs and Reynolds, 2005).*”

In the preceding CfBT research paper, Churches and West-Burnham noted that:

*Research consistently shows that what teachers do in the classroom is at the heart of school effectiveness and that classroom practice is the factor that most influences children’s progress (Muijs and Reynolds, 2005).*

(Churches and West-Burnham, 2008: 5)\*.

In particular, they suggested a number of key areas that NLP appears to have the potential to support and which should be explored further in relation to research:

- *the importance of interpersonal and intrapersonal skills, in particular the definition and implementation of agreed models of ‘best practice’ (West-Burnham, 2004; West-Burnham and Ireson, 2005)*
- *effective behaviour management through the application of contingent praise, (Brophy, 1981), school-wide consistency (Reynolds, 1992) and a continuous ‘schedule’ of positive reinforcement (Muijs and Reynolds, 2005)*
- *the effect of body language (Rosenthal and Ambady, 1993) and non-verbal warmth (Harris and Rosenthal, 1985) on student expectations and self-concept*
- *the relationship between self-concept, self-esteem and achievement and the issue of the moral and social status of the individual learner (Muijs, 1998; Marsh et al. 2002; Guay et al., 2003) – fundamental to any attempt to personalise learning*
- *the effect of teacher expectations on the climate of classrooms and school improvement (Reynold and Muijs, 2005; Mortimer et al., 1988) and negative beliefs and biases (see e.g. Brophy and Good, 1986)*
- *effective questioning (Rosenshine and Furst, 1973; Brophy and Good, 1986; Gagne et al., 1993), ‘higher-order’ questions (Mortimore et al., 1988), frequency of questions and detailed questioning approaches (Muijs and Reynolds, 1999)*

- *the central importance of values, moral purpose and spirituality for effective school improvement. This has been demonstrated time and time again, and there is now a substantial body of work that support this (e.g. Fullan, 2003; 2005[b]; Leithwood et al., 2006; West-Burnham 2002; West-Burnham and Huws Jones, 2007)*
- *the suggested link between leaders practising and developing behaviours that go with values associated with moral purpose (Fullan, 2001) and real breakthroughs in development occurring, from not just from doing, but also from ‘thinking about the doing’ (Fullan, 2007)*
- *the impact on learning of teacher identity, values and beliefs, especially the movement from ‘teacher’ to facilitator (Korthagen, 2004; Gudmundsdottir, 1990; Atkinson, 2004; Pachler et al. 2003; Dragovic, 2007).*

(Churches and West-Burnham, 2008: 20)\*

The evidence from the literature and case studies we believe bears out these initial observations and particularly the relevance of NLP to teacher effectiveness, communication skills and the development of emotional and social literacy with children as perceived by teachers. Furthermore, we suggest that there are several routes that future research and academic work should take:

- the development of research which clearly defines which domain of NLP is being researched and adopts an appropriate methodology for that domain (see for example discussions of the ‘Six Faces of NLP’: Tosey and Mathison, 2009)
- specific methodology – appropriate research into NLP techniques for which there are no specific parallels with other fields and which need to be researched on their own merits (e.g. the application of language from hypnosis)
- research which looks at those areas where there appear to be parallels between the theoretical position adopted in much NLP writing and recent neuroscience (particularly, the field of social cognitive neuroscience)



- research to clarify the field of NLP in relation to education research on teacher effectiveness and also with initial teacher training
- further efforts to re-conceptualise the ways in which NLP training talks about itself and its relationship to the fields of psychology and neuroscience to ensure that, where appropriate, there is a clearer read-across
- larger scale research which controls for confounding or undermining variables and recognises the limitations of small-scale practitioner-led enquiries (as discussed on pages 21 and 22)

Alongside this, we believe that the diversity and eclectic nature of NLP, rather than presenting a research problem in fact presents an opportunity for the exploration of mixed methodology in an education context. Specifically, in relation to those elements of NLP which appear to have parallels with theories and concepts from psychology and neuroscience, the opportunity for quantitative methods to sit more comfortably alongside qualitative ones.

## 9. Glossary for the areas of NLP that were the focus of the various case studies

“Anchoring involves the deliberate association of a positive feeling or action to a stimulus so that when that stimulus is experienced again the person or group responds by either experiencing those emotions again or by carrying out the action automatically.”

### Anchoring

Anchoring involves the deliberate association of a positive feeling or action to a stimulus so that when that stimulus is experienced again the person or group responds by either experiencing those emotions again or by carrying out the action automatically. It is often described in NLP training as a sort of Pavlovian conditioning for people.

### Eye accessing cues

Ideas about eye position (when people are thinking) are included in most NLP training although the explanations of this area of NLP are controversial (see our literature review for a discussion). In relation to eye accessing cues and learning there is, however, some evidence to support eye position and effective memorising of spellings.

### Relationship rewards

Much of the underlying philosophy of NLP is derived from the work of Gregory Bateson (the anthropologist). Bateson went beyond the concepts of classical and operant conditioning to identify the need to reward simply to preserve relationships and that in doing so higher-order animals become more motivated to move from what he called Learning I (where behaviour is simply corrected from within a set of alternatives) to Learning II (where learning includes a recognition and awareness of the context and multiple alternatives). Learning II has in recent years been frequently associated with the notion of *Learning to Learn*.

### Storytelling and metaphor

Storytelling and metaphor were widely used by Milton Erickson (the hypnotherapist). As well as noting the potential of such techniques to support learning and change, early NLP texts modelled and described the structure of effective storytelling in such contexts.

### Meta model questioning

Virginia Satir (the family therapist) was used as a model for looking at the use of questioning

and language in therapy. As in their studies of hypnosis, Richard Bandler and John Grinder used ideas from General Semantics (see below) to describe and name the types of language that were being used.

### Milton model language

Richard Bandler and John Grinder studied the language of Milton Erickson, the highly respected hypnotherapist. Using concepts and ideas from General Semantics (particularly, Lauri Karttunen's ideas about presupposition in language and Chomsky's ideas about the deep and surface structure of language) they described and named the different language patterns that can be used to make suggestions in a therapeutic context. Later NLP writing has applied this way of looking at language to a much wider range of contexts, including: teaching and learning, counselling, management and leadership, and sales.

### Non-verbal communication

As well as containing ideas about the structure of language, NLP training usually includes a focus on the effect of body language and other non-verbal communication such as voice tone.

### Rapport

It was in studies of the work of Milton Erickson that ideas about rapport came into NLP. Erickson would consciously 'match' the body language, voice tone and types of language that his clients used in order to gain insights into their 'map of the world' and to build relationships and trust as part of the process of hypnotherapy.

### Sensory acuity

NLP training frequently includes exercises to develop sensory acuity (the ability to notice small changes in body language, facial expressions, voice tone and posture to enhance awareness of what another person is thinking and feeling).

### Submodalities

NLP includes ideas about the role of internal representation (internal imagery, including sounds and feelings). Specifically, the therapeutic aspects of NLP often involve making changes in the elements of internal representation in order to change behaviour (for example, whether a past or future event is remembered or thought of in black and white or in colour; whether it seems distant or near etc.).

### Visualisation

Visualisation is what it says. However, in NLP the emphasis is often on the visualisation of positive future goals as if they have already been achieved (including detailed information about what will be seen, heard (internally in terms of self talk and externally in relation to the sounds around) and emotions and bodily sensations.

### Well formed outcome

The well formed outcome process is a detailed form of goal setting process that includes a range of areas. It is frequently carried out in a coaching context rather than with eyes closed and involves the person being coached exploring all the areas of their life that they may need to change and develop.

**The References section of this research can be found in the full PDF version on the CD-ROM.**

## Appendix 1 – The evidence about the use of NLP in education – a review of the literature (continuation and detailed evidence and discussions)

“...the publications themselves include a very wide range of methodologies and an equally wide range and depth of evidence that is presented for interpretation.”

### Limitations of this review

Despite the evidence, this review should only be considered to provide an interim assessment for a number of reasons.

Firstly, NLP is a very wide and extensive community of practice. L. Michael Hall, for example, describes 77 basic NLP techniques alone (Hall, 2005) and there are many other texts outlining variations, additions to and adaptations of these (see the review of the early popular literature and popular education literature below).

Secondly, there are relatively few confirmatory research studies when compared to the extensive wider literature on teaching and learning and teacher effectiveness. By way of contrast, Muijs and Reynold's seminal work on effective teaching (Muijs and Reynolds, 2005) references several hundred academic journal articles containing research evidence. Thirdly, across a number of the confirmatory studies, and all of the disconfirmatory ones, methodological issues can be identified either in relation to the size and scale of the research study, or issues of reliability and validity.

Furthermore, the table below and summaries are not intended to be a 'vote-counting' form of meta-analysis and readers should avoid interpreting them as such. Vote-counting alone confuses effect and sample size, as statistical significance is in fact a function of both. Quantitative meta-analysis, however, would not be meaningful because of the small number of experimental studies. Rather the table and discussions, we hope, will form a useful categorisation of the types and nature of the studies that are available for further scrutiny by other researchers. As is noted above, the field of NLP is very wide and, in this respect, extant studies only touch the surface of the literature

and techniques that are described in books and in NLP training.

Finally, the publications themselves include a very wide range of methodologies and an equally wide range and depth of evidence that is presented for interpretation.

### Summary and categories of types of evidence reviewed

**Note: references included in this table are indicated in the text with an asterisk\***

In table 4 below the terms 'confirmatory' or 'supportive' have been used to indicate studies or papers with research evidence where the writers have clearly identified either qualitative reports of benefit or statistical evidence which they claim as significant and supportive of there being an effect. 'Disconfirmatory' or 'unsupportive' has been applied to publications that have reported no effects. This said, the only disconfirmatory evidence that we could identify was quantitative and from the 1980s.

The initial search revealed five sources where the content of the publication was unavailable for review (Cleaver, 1997; De Luynes, 1995; Newell, 2000; Pruett, 2002; Ronne, 1998)\*. The subsequent cross-check against NLP online research databases identified a number of additional postgraduate theses for which we were unable to access the abstract or dissertation. This included eight Masters level dissertations (Allbright, 1983; Crawford, 1991; Currier, 1993; Denney, 1996; Hismeh, 2005; Lisman, 1995; Nelson, 1992; Nesbitt, 1985; McHugh, 1986)\* and one PhD dissertation (Day, 1985). This final search also produced one more inaccessible journal article (Love, 2001).

Three papers (Churches and West-Burnham, 2009; Malloy, 1989; 1995) repeat evidence

**Table 4: Categories of types of evidence reviewed**

Type of evidence	Confirmatory/ supportive	Positive	Disconfirmatory/ unsupportive	Negative	Total
Qualitative	27		0		27
Mixed method	7		0		7
Quantitative	18		6		24
Author perspective, with no, or only partly, associated research evidence		30		4	34
<b>TOTALS</b>	52	30	6	4	<b>92</b>
Total available	82		10		
Unable to review			16		
Papers which repeat evidence			3		
<b>Total publications identified for review</b>			<b>111</b>		

from earlier research. Two papers on improved parenting (Brandis, 1987; de Mirandi, 1999)\* and one which discusses developing positive parent-school relationships (Hall *et al.* 2005)\* have been included because of the increasing recognition of the importance of parental influence on the development of children's social skills (see for a discussion, Mujijs and Reynolds, 2005) and pupil outcomes.

The 58 references from the initial search not included in the review consist of: 28 publications specifically from the fields of counselling, family therapy and psychotherapy; 12 opinion-piece articles from teacher professional magazines or sources; six publications focused on training; five publications containing workshop materials or technical data only; four from other non-education perspectives; two book chapters; one early bibliography of NLP literature (McCormick, 1987).<sup>7</sup> Alongside this, there are parallels and crossovers between the field of NLP, accelerated learning (Smith 2000; 2002; 2003; Smith and Call, 1999) and areas of teacher professional practice associated with

the phrase 'learning to learn' (e.g. Claxton, G., 2002; Higgins, 2001; Lucas, B., 2001; Watkins, 2001). However, we have confined this review to articles and publications that directly reference or talk about NLP.

### Qualitative and mixed method evidence

Of the total of 92 available and reviewed publications, 34 contained varying degrees of qualitative (27), or mixed method evidence (7), that is either confirmatory or supportive of the use of NLP in education within a range of contexts, including higher education.

Evidence and foci include: classroom language and/or language and learning (Millrood, 2004; Parr and And, 1986; Mathison, 2004; Tosey and Mathison, 2003a; 2008c; Tosey, Mathison and Michelli, 2005)\*, emotional state management using the NLP technique of anchoring (Thalgott, 1986)\*, non-verbal communication in adult learning (Hillin, 1982)\* and communication in general (Dolnick,

<sup>7</sup>Note: Of these there were only nine that presented disconfirmatory research evidence, all of which were early quantitative studies published in journals related to counselling. None of the teaching related magazines and other professional publications that were accessible were negative in their discussion of ideas from NLP.

“... enhanced teachers' awareness of the fact that by creating or ruining teacher-learner congruence their classroom discourse can lead learners to success or failure.”

2006)\*. Millrood (2004)\* suggests, for example, that workshops in NLP:

... enhanced teachers' awareness of the fact that by creating or ruining teacher-learner congruence their classroom discourse can lead learners to success or failure.

(Millrood, 2004: 10)

Other papers show support for the use of NLP alongside other learning strategies with the elderly in an e-learning context (Sheridan, 2008)\*; as a means of building positive relationships with parents in the context of a learning to learn programme (Hall *et al.* 2005)\*; and the use of sensory modalities in the management of aggressive behaviour (Fruchter, 1983)\*. Sensory modalities have also been explored in doctoral research at the University of Huddersfield, which looked at Learning Styles and NLP Representational Systems with nursing students. This research suggested support for the application of ideas about internal representational systems, the matching of predicates (sensory word language) and body movements (Burton, 2004)\*.

There is also research into the use of multi-modal approaches from NLP to support learning with primary school age students in Singapore – led by Rahdi Raja of the National Institute for Education (Raja and Tien, 2009)\*.

The research by Jane Mathison (University of Surrey), mentioned above, was as far as we know the first doctoral research into the potential of NLP language patterns to support learning. Mathison (2004)\* looked at the relationships between language and thought and suggests that teacher training needs to begin to 'address the interplay between language, thought and learning'.

A CfBT large-scale teacher perceptions study (the forerunner to this publication) contains a content analysis of information from 380 teachers in relation to perceptions of the potential use of NLP following 30 hours of NLP training (Churches and West-Burnham, 2008; 2009)\*. Three other CfBT papers (Jones and Attfield, 2007; Hutchinson, Churches

and Vitae, 2006; 2007)\* contain evidence of impact in relation to NLP, school leadership development and school improvement. The use of NLP within the UK Government's Fast Track teaching programme is discussed in detail in Churches and West-Burnham (2008)\*. Additional background information about this leadership development programme can be found in Churches, Hutchinson and Jones, 2009.

The use of NLP ideas about language and communication emerged strongly in the teacher perceptions research by Churches and West-Burnham (2009)\*, the full details of which (and content analysis) can be found in Churches and West-Burnham (2008)\*. Specifically, teachers viewed NLP concepts about the use of language to influence as useful both in relation to the promotion of positive behaviour and in relation to supporting learning. These findings can in part be said to have a parallel with ongoing research into teacher development by Tatijana Dragovic. Her interim report on PhD research into the effectiveness of NLP shows evidence in relation to supporting the development of teacher professional identity (Dragovic, 2007)\*.

As well as the evidence above, there are publications that support the effectiveness of various NLP techniques in relation to developing self-esteem with primary school age children (Childers, 1989)\*, in educational psychology (Beaver, 1989)\*, for the reduction of test anxiety through a combination of NLP and hypnosis (Stanton, 1998)\* and in adult leadership development (Young, 1995)\*. In relation to adult learning and anxiety management there is also a Pentagon report<sup>8</sup> of Masters-level dissertation evidence that supports the use of NLP (particularly the use of timeline approaches), at the Naval Post-Graduate College in Monterey, to reduce anxiety related to the giving of oral presentations and briefings (Brunner, 1993)\*.

A study into the relevance of metaprogrammes to students' perceptions of quality of teaching provides further evidence in relation to higher

<sup>8</sup><http://www.stormingmedia.us/65/6577/A657772.html>, 28 July 2009.



“Where students have different meta programme preferences from the teacher, then, even where the ‘hygiene factors’ are met, this leaves the student dissatisfied.”

education (Brown, 2004)\*. Specifically, Brown suggests that

... [the] teacher's meta programmes influence the approaches adopted in their teaching and these styles suit students with matching meta programme preferences. Where students have different meta programme preferences from the teacher, then, even where the 'hygiene factors' are met, this leaves the student dissatisfied.

(Brown, 2004: 515)\*

He concludes that

... 'hygiene factors', such as 'knowledge of the subject', 'sense of humour', 'approachability' and 'willingness to answer questions' were, as expected, relevant to achieving teaching competence. Other qualities that would contribute to teachers being 'highly competent' (Elton, 1996), such as the ability to teach at the same level as the students and having the flexibility to explain things in different ways, emerged as important qualities. There are examples of teachers teaching from their own meta programmes which suited some students but not others. An improved awareness of meta programmes could result in a more flexible approach.

(Brown, 2004: 520)\*

Further evidence in relation to metaprogrammes is discussed below. As well there is evidence which suggests that using NLP with undergraduates can 'offer a student-friendly and multi-dimensional approach to skills development and simultaneously reinforces the ethos of lifelong learning' (Johnson, 2004: 1)\*.

Bostic St.Clair and Grinder (2001) propose that NLP is best understood if seen as three distinct areas:

- NLP as application (NLP<sup>application</sup>)
- NLP as training (NLP<sup>training</sup>)
- NLP as modelling (NLP<sup>modelling</sup>)

Such a line of thinking has led to the use of NLP as a formal university-based research methodology, particularly in relation to transformational learning (see Mathison and Tosey, 2008a; b)\* and in relation to action

research (Steinfeld and Ben-Avie, 2006)\*, papers that are discussed below in the review of positive perspectives papers. The application of NLP to the study of first person experience during learning produced evidence of the importance of becoming mindful and more aware during learning. It is suggested that the use of appropriate language and questioning enables learners to make more 'fine-grained distinctions', which in turn effects a transformation in understanding (Mathison and Tosey, 2008c)\*; see also Tosey and Mathison (2009).

Six mixed-method studies are supportive of the use of NLP in education in relation to modelling, transformational learning and meta-cognition (Munaker, 1997)\*, the use of modelling in the classroom as a preparation for AS-Level examinations (Day, 2005; 2008)\* and improved learning and behaviour of children with Social, Emotional and Behavioural Difficulties (Squirrel, 2009)\*. Similar evidence of improved motivation and performance with children with learning difficulties is to be found in a German doctoral research study (Zechmeister, 2003). There is also evidence of the effectiveness of a 'Quiet Place' programme for pupils with social, emotional and behavioural difficulties in mainstream schools that incorporated significant amounts of NLP-related activity (Renwich, 2005)\*. In relation to the results of her study, published in the British Psychological Society journal *Education and Child Psychology*, Renwich writes that

*The significant differences in classroom behaviour between the two research conditions noted after the intervention period are found to have persisted at a statistically significant level for one year.*

(Renwich, 2005: 78)

The research was carried out in three different schools with a control sample of 51 participants and pre- and post-interventions groups of 29 after six months and 25 after one year.

In relation to adult job-related training, a study by Thompson, Courtney and Dickson (2002)\*, looked at the longitudinal effects of NLP training on 67 hospitality workers. They found increases in interpersonal communication with specific effects in the areas of self-efficacy,

“Quantitative results... indicate that students who engaged with the workshop series performed better in the dissertation, and also in their overall degree classification, than students in their cohort who did not engage with the programme.”

self-esteem, and adaptive selling. Finally, a recent study at the University of Glamorgan demonstrated the effectiveness of the use of the NLP well formed outcome goal-setting process to support undergraduate learning in relation to the completion of dissertations. Skinner and Croft (2009)\* report that

*Quantitative results... indicate that students who engaged with the workshop series performed better in the dissertation, and also in their overall degree classification, than students in their cohort who did not engage with the programme.*

(Skinner and Croft, 2009: 38)

The majority of the evidence above is, however, from small-scale case study work (some of it single-subject case study (e.g. Beaver, 1989; Stanton, 1998)\*). There are no substantial teacher-led action research case studies, suggesting that the research evidence in this paper is the first of its kind and fills a key gap in the research evidence.

### Quantitative evidence

Of 24 papers and articles that make use of a quantitative methodology, or that reference to quantitative evidence, 18 provided confirmatory or supportive evidence – although some of this is presented in a raw percentage form without indications of statistical significance and effect size (e.g. Beeden, 2009)\*.

There is specific evidence in relation to the application of metaprogrammes in higher education (Brown, 2002; 2003; Brown and Graff, 2004)\*. Churches and West-Burnham (2008; 2009)\* suggest metaprogrammes can be viewed as preferences for processing information that influence behaviours. As such, metaprogrammes could have a parallel with the concept of traits in applied psychology and schemata from cognitive psychology (Cdaqprofile, 2007). A schema can be seen as a form of representation that is used as a guide to action (Rumelhart and Norman, 1983; Norman and Shallice, 1986) and as Churches and West-Burnham note:

*Piaget (1962) argued that an understanding of schemata is crucial to understanding cognitive development and that schemata*

*are iterative and therefore change over time as new situations and experiences occur – resulting in alterations of mental representation and beliefs about the world.*

(Churches and West-Burnham, 2009: 133)

Brown's research makes use of two approaches to the exploration of the concept: the Motivation Profile Questionnaire (MPQ) and the Language and Behaviour (LAB) profile (Brown, 2002)\*. Recently, a new personality instrument measuring 11 metaprogrammes, the Cdaq (Brewerton, 2004; Cdaqprofile, 2007) has received British Psychological Society 'three star' accreditation (Fisher and Parkinson, 2004; 2007). This suggests a level of psychological validity and reliability in line with more frequently used instruments (such as 16PF, MBTI, OPQ and FIRO-B). Significant correlations have been demonstrated between Cdaq dimensions and OPQ (Occupational Personality Questionnaire) and MBTI (Myers Briggs Type Indicator) scales, evidence that, alongside their potential relationship to schemata, has led Churches and West-Burnham to suggest that

*Metaprogrammes appear to have a more robust basis in relation to psychological validity and reliability than more general conceptions of learning style – the effectiveness of which is widely disputed (Davis 1988; Knight 1990; Stahl 2002; Coffield et al. 2004a; 2004b; Hargreaves et al. 2005).*

(Churches and West-Burnham, 2009: 133)

In relation to behaviour management and learning with underachieving students, doctoral research that describes the use of NLP to enhance learning and coping skills for high-risk students in community colleges in the United States suggests changes in both student preconceptions and behaviours (Esterbrook, 2006)\*. The study demonstrated statistically significant change in areas such as self-reported anxiety/depression and social assertion.

The efficacy of NLP visual spelling strategies with children with learning disabilities is noted by Kennedy and And (1994)\*. Although a small-scale study, Kennedy and And found that the experimental group achieved significantly higher spelling scores than the

“... tailor new, personalised strategies for successful learning, retaining, and recalling, without slipping into negative self-images and self-talk (Anderson, 1981; Dilts, 1998; 1999; O'Connor & Seymour, 1990).”

control group and that participants were able to generalise the NLP methods to other areas of learning, in particular mathematics. There is also some evidence of the importance of concepts of learning modality in adult learning in general (Helm, 1990; 1991)\* although an earlier unpublished study, which looked at a college reading programme, found no evidence of advantage in relation to preferred sensory modality and attainment, or course completion (Semter, 1986)\*. This study is discussed further below. Thomas Malloy of the University of Utah Department of Psychology (reported in Dilts and Epstein, 1995) is similarly supportive of the NLP spelling strategy (Malloy, 1987)\*. This research is further referred to in Malloy (1989; 1995)\*. The effect of specific sensory awareness and eye placement on 'orthographic' memory and the spelling strategy is also supported in an earlier study (Loiselle, 1985)\*.

Other studies contain quantitative data of effects in relation to the use of the NLP Creativity Strategy to improve attainment in art and design in further education (Beeden, 2009)\* and a report on the effectiveness of a 'Sun-flower therapy' with dyslexic children (Bull, 2007)\*. Evidence of the effectiveness of the Sun-flower therapy can also be found in a study published in a German journal (Otto, 2006) and there is partial quantitative evidence of benefit (a strong experimental effect within one sub-group of participants) in relation to reducing parental anger responses towards children (Brandis, 1987)\*. Other confirmatory evidence of the use of NLP to support the mothers of children in a shantytown in South Africa (De Mirandi *et al.*, 1999)\* indicates beneficial effects on the home environment with 23 children following 15 sessions of NLP. Comparisons were made in terms of children's psychomotor development, home environment and maternal mental health before and after the intervention.

In relation to improved memory and retention a recent e-learning study (Ghaoui and Janvier, 2009)\* found that a student's retained knowledge was improved from a mean average of 63.57% to 71.09% – moving students from a B to an A when an 'intelligent/interactive tutoring system' was used. The system included: 'psychometric tests, communication preference, learning

styles, mapping learning/teaching styles, neurolinguistic programming language patterns, subliminal text messaging, motivational factors, novice/expert factor, student model, and the way we learn.' As with a number of the qualitative studies discussed above, it is of course impossible to isolate easily the specific contribution of NLP within the context of the study. Other research into e-learning and NLP, at the Department of Electronics, York University, demonstrates preliminary evidence in relation to the 'benefit of matching [an] individual's NLP sensory preference to adaptive e-Learning content delivery' (Zhang and Ward, 2004: 7)\*.

In addition to the specific studies above, Day (2008a) suggests that quantitative studies by Ben-Avie and colleagues (2003)\* can be seen as supportive of the use of NLP. Although the particular studies (Ben-Avie *et al.*, 2003: 30)\* reported in their book chapter do not specifically mention NLP they do provide evidence of a relationship between areas frequently discussed in the NLP literature and attainment in mathematics and science (e.g. social knowledge, the relationship climate in the classroom, learners' self-concept and motivation). Also, the studies made use of the *Learning and Development Inventory*, which as is later noted by Steinfeld and Ben-Avie, (2006) was 'developed by blending psychometric principles with best practices in Neuro-Linguistic Programming (NLP)' (2006: 1). Ben Avie *et al.* (2003)\* reference four NLP books (Anderson, 1981; Dilts, 1998; 1999; O'Connor and Seymour, 1990) and in relation to these suggests the need for teachers to:

... tailor new, personalized strategies for successful learning, retaining, and recalling, without slipping into negative self-images and self-talk (Anderson, 1981; Dilts, 1998, 1999; O'Connor & Seymour, 1990).

(Ben-Avie *et al.*, 2003: 16)

As we mentioned at the start of this review, the quality and depth of the supportive evidence is variable. We have, however, taken the view that we should present all of the evidence and where we have particular concerns, point to limitations in the findings. In the same spirit we have included all of the early disconfirmatory studies – despite the fact that we have

“However, the basic premise of the research is flawed, as serotonin levels in the brain do not necessarily relate directly to levels in the blood, as it cannot cross the Blood Brain Barrier.”

methodological concerns about them. In relation to questionable findings, one recent ostensibly confirmatory study stands out in particular. Girija Navaneedhan and Saraladevi Devi (Meston College of Education, Chennai, India) looked at levels of the neurotransmitter serotonin in blood samples before and after adopting some NLP related learning techniques and suggested 'a significant relationship between learning techniques and the information processing ability of an individual' (Girija Navaneedhan and Saraladevi Devi, 2009: 1)\*. The study involved 400 students (2009: 26) in the age group 13 to 17 over six months with participants divided into experimental and control groups of 200 students each. This study raises concerns on a number of levels. Firstly, it applied aspects of NLP researched largely from articles on the internet<sup>9</sup> – including a mind mapping journey method, anchoring, visual imagery and metaphorical thinking. Secondly, the mixing up of NLP techniques with ideas from other areas makes it difficult to draw firm conclusions about precisely what was having an effect within the intervention. More seriously, the use of an invasive procedure (such as the taking of blood from children) should be done only with a strong ethical justification. Girija Navaneedhan and Saraladevi Devi's argument is that the techniques they have used have had an effect on information processing in the brain and that levels of serotonin in the blood show this. However, the basic premise of the research is flawed, as serotonin levels in the brain do not necessarily relate directly to levels in the blood, as it cannot cross the Blood Brain Barrier.

### The disconfirmatory evidence – a discussion

In total 45 out of 51 publications that contain research evidence, or dissertation evidence, are confirmatory or interpret evidence as demonstrating a positive impact for the use of NLP in education. Of the six papers that contain disconfirmatory evidence specifically from an education context (Bradley, 1986; Fremder, 1986; Brien, 1986; Semtner, 1986; Cassiere and And, 1987; Schleh, 1987\*) all are quantitative in methodology and are at least

20 years old. On closer inspection they can all be said to suffer from problems affecting validity. These include inaccurate application of elements of the NLP model and methodological issues. Similar issues have been identified in the early research evidence from the fields of psychotherapy and counselling discussed in a meta-analysis by Heap (1988) and in an earlier review by Sharpley (1987). As Tosey and Mathison (2007) point out:

*Beck and Beck (1984), Einspruch and Forman (1985), and Bostic St.Clair and Grinder (2001) argued that the types of study reviewed by Heap are characterised by problems affecting their reliability, including inaccurate understanding of NLP's claims and invalid procedures due to (for example) the inadequate training of interviewers, who therefore may not have been competent at the NLP techniques being tested.*

(Tosey and Mathison, 2007: 9)

They further expand on this area in Tosey and Mathison (2009).

The earliest quantitative education study to claim disconfirmatory evidence (Bradley, 1986)\* for one area of NLP demonstrates similar misunderstandings to those discussed above in relation to the nature of the specific NLP technique tested and consequent implementation of a weak research design. Bradley, in a Masters Level dissertation (MPsych), looked at the use of anchoring (Bandler and Grinder, 1979) to support test anxiety. The study found no significant effects. However, the study attempted to operationalise the effect of anchoring on areas such as pulse rate and finger sweat before and after test experiences, whereas NLP makes no claim for such a longer-term effect for this specific technique. Rather, anchoring (a form of stimulus to response activity based on ideas from Pavlovian conditioning (Pavlov, 1927) – e.g. touching a knuckle that has previously been associated with an emotional state in order to experience those feelings again) is claimed to produce state emotional management effects, as an activity is being carried out, and only during the use of the anchor.

<sup>9</sup>Personal correspondence with the main author, 18 August 2009



Research into states, and altered states of consciousness (Pekala, 1991a), suggests that such distinct experiences can be highly ephemeral and rarely last for more than 2–4 minutes. As such, it could be argued, they require a research approach that is able to quantify and/or explore subjective or phenomenological experience (see e.g. Pekala, 1985; 1991a; Pekala and Ersek, 1992/3; Pekala and Kumar, 2007), rather than traditional empirical methods. Other forms of psycho-phenomenology and the study of first-person experience, based on the work of Vermersch (2004), have been shown to be of use as a research methodology in combination with NLP (Mathison and Tosey, 2008 a; b).

In the second of the six disconfirmatory education based studies, Fremder (1986)\* carried out research using learning disabled students to assess whether training visual dot pattern strategies would transfer to different pattern tasks as well as generalise to arithmetic sequencing. Students were allocated to three groups: standard cognitive training, standard cognitive training plus NLP and a control group. The results showed significant transfer effects for both treatment groups when compared to the practice group but no difference between the treatment groups. However, the mixing of the two treatment therapies in the second research group may have prevented an assessment of the potential confounding variable of an attainment ceiling having been reached (irrespective of the effect of either or both therapies) and the possibility that the NLP strategy was in fact as effective as the cognitive strategy. Further, as far as we are aware, no specific NLP strategy claims to improve this form of pattern recognition.

Similarly Brien (1986)\* in Masters level research (MPSych) relating sensory preference to academic and occupational performance in general found no evidence to support the concept and Cassiere and And (1987)\*, in a higher education study with college students in the United States of America, found no evidence for gender differences in relation to primary representational system. However, in relation to both these studies (Brien, 1986; Cassiere and And, 1987) we are aware of no claims in the NLP literature that relate to the

specific areas of study that they identified, particularly in relation to gender differences.

Schleh (1987)\* in an examination of the NLP eye movement hypothesis in children suggested partial support for the hypothesis that children would demonstrate a consistent, observable relationship between question stimuli and eye movements. He found that there was no evidence that older children demonstrated consistent eye movements in relation to various questions. However, his results did indicate that younger children made significantly more 'auditory' eye movements than did the high school subjects, while high school subjects made significantly more 'visual' eye movements. Schleh concluded that rather than being consistent with the NLP eye movement hypothesis, the results are suggestive of a developmentally based bias in the direction of eye movement responses.

A closer look at Schleh's methodology shows that he applied an approach that consisted of a combination of administering questions that had been categorised as visual, auditory, or kinesthetic in nature, and asking participants to spell words of average difficulty from the spelling subtest of a standardised Achievement Test. An approach that we would suggest combines and confuses two different parts of the NLP model: the mapping of subjective experience through the observation of eye movements and the spelling strategy.

Another apparently disconfirmatory research study (Semtner, 1986)\* sought to determine whether students having different primary representational systems made similar gains in an individualised college reading programme. This study found no benefit in development between students who seemed to have either: visual, auditory or kinaesthetic modalities, as a primary representational system (the NLP term for sensory preference). Although disconfirmatory in relation to the hypotheses that Semtner set out to test, we are not aware of any NLP literature that makes the claim that a person's primary representational system (as defined in the NLP literature) correlates to success in this area. Rather than actually disconfirm this seems to support a relationship between questions and eye movements and to advance a different hypothesis about the specific nature of that relationship.

“Eye movements are a controversial area, albeit one that represents only a very small element in a vast array of NLP techniques.”

Eye movements are a controversial area, albeit one that represents only a very small element in a vast array of NLP techniques. As far as we are aware, no research study has established or completed disproved the hypotheses presented in much NLP literature. However, as Churches and Terry (2007) note, recent neuroscience and psychology evidence has shown that some eye movements are driven by linguistic expression (Altmann, 2004) and that these forms of movement are based on the location of the internal representation of the scene being described (Altmann, 2004; Altmann and Kamide, 2004); also eye scanpaths, during visual imagery, may 'reenact those of perception of the same scene' again indicating that some forms of eye movement are not epiphenomenal (Laeng and Teodorescu, 2002). Further, eye positions have been shown to modulate brain function during guided memory (De Souza *et al.*, 2000) and there is a coupling of speakers' and listeners' eye movements during some forms of discourse (Richardson and Dale, 2005).

Drawing the available evidence together, the most recent peer-reviewed survey of the literature on NLP eye accessing cues argues that there is substantial grounds for further research and the need to identify appropriate research designs that avoid some of the methodological issues in many of the early studies (Diamantopoulos, Woolley and Spann, 2009).

In conclusion, the body of early quantitative education-related research in the 1980s generally appears to have failed to take into account that the effectiveness of NLP is likely to be the result of the application of several approaches at once (rather than isolated techniques) together with the context. We believe that NLP faces similar methodological challenges to researching effective subject pedagogy. As in teacher effectiveness, where a series of factors may come into play with several needing to be present to ensure high effectiveness (alongside an appropriate application) so it would appear to be with interpersonal and intrapersonal effectiveness. However, if we take as a benchmark for effectiveness what serving teachers actually say themselves within qualitative and mixed method studies, then initial research can be said to be both positive and strongly suggestive of a need for further, more in-depth research.

### Papers and publications that contain perspectives on NLP and its application in education without directly reporting associated research evidence

The perspectives papers and publications are overwhelmingly supportive of the use of NLP in education. Of the 34 reviewed papers and publications, 30 support the potential of NLP to enhance learning and teaching.

Supportive perspectives are offered in relation to the potential of NLP in education in the areas of language and learning (Eckstein, 2004; McCabe, 1985; Marcello, 2003; Tosey and Mathison, 2003b)\*, matching teaching and learning styles using NLP concepts (Knowles, 1983)\*, specific learning difficulties (Burton, 1986; Helm 2000; Woerner and Stonehouse, 1988; 2000)\*, non-verbal communication and interpersonal skills in the classroom and in school leadership (Childers, 1985; Clabby and O'Connor, 2004; Helm, 1989; 1994)\*, child counselling (Taylor, 2004)\*, visual literacy (Ragan and Ragan, 1982)\*, English instruction (Helm, 2009)\* and outdoor education (Lee, 1993)\*.

There are supportive perspectives on NLP and adult learning for careers education (Murray and Murray, 2007)\*, self-expression (Winch, 2005)\*, adult peer counselling (Dailey, 1989)\* and management learning (Dowlen, 1996)\*. Also there is a very brief report in *The Lancet* on the use of NLP, alongside Ericksonian hypnosis, trance techniques and relaxation, to support the children who experienced the Beslan school siege (Parfitt, 2004)\*. Two other short perspective pieces appear in *NLP World*, which was the first publication to attempt to be an academic-style NLP journal, as distinct from a magazine for practitioners (*NLP World* was published between 1994 and 2001). These consist of a perspective on NLP techniques to support emotional state management in teaching (Bolstad and Hamblett, 1998)\* and an article on the use of NLP to support children with specific learning difficulties (Zdzienski, 1994)\*.

Positive perspectives are presented in a University of Newcastle-upon-Tyne and Campaign for Learning case study report in



“*Neuro-Linguistic Programming (NLP) is enhancing the design and execution of education research projects.*”

relation to the use of NLP in coaching and to support study skills (Welham, 2004)\*. There is also support for the use of NLP in EFL (English a Foreign Language) teaching in a paper by Tony Harris of the University of Grenada (Harris, 2001)\*.

Four papers offer theoretical support for NLP in education (Sandhu, 1994; Stanton, 1989; 1994; Tosey and Mathison, 2003b)\* and, as discussed above, on the use of NLP as a methodology for the academic study of learning (Mathison and Tosey, 2008a; b)\* and action-based education research in general (Steinfeld and Ben-Avie, 2006)\*. Steinfeld and Ben-Avie (2006)\* suggest that NLP has demonstrated usefulness in action-based education research and that:

*Neuro-Linguistic Programming (NLP) is enhancing the design and execution of education research projects. It is also increasing the acceptance of research findings that demonstrate the interdependence of social development, emotional development, and academic learning.*

(Steinfeld and Ben-Avie, 2006: 1)

The paper offers perspectives on the benefits of ‘blending NLP into the collection, assessment, interpretation, and presentation of quantitative and qualitative data’ (2006: 1). Two of the theoretical papers (Sandhu, 1994; Stanton, 1994)\* discuss whether there is a relationship between NLP and Suggestology and Suggestopedia (an early form of thinking about accelerated learning which drew particularly on notions of suggestion and learning from hypnosis (see for examples, Lozanov, 1978; Schuster and Gritton, 1986)).

Four papers contain critical views, or comments on NLP. Of these, the only paper which looks at NLP in any detail is a theoretical perspective by Craft who criticises NLP for being a collection of tools and approaches with no real theoretical coherence (Craft, 2001)\*. However, as Tosey and Matheson point out in their response to Craft’s paper (Tosey and Mathison, 2003b)\* and again in a later article (Tosey and Mathison, 2007) ‘NLP was described as a methodology [Bandler and Grinder 1975a], the purpose of which was to investigate exemplary communication, not to create a body of practice’, nor did it set out to inform learning theory per se.

Of the three other critical papers, two make only a passing reference to NLP. Burton (2007)\* has a single line criticism describing NLP as a ‘novelty claim’; however, there is no discussion about the content of NLP nor is any reference made to the academic literature. Another earlier critical paper does not dismiss the effect of NLP approaches as such but rather suggests that these are the result of ‘psycho shamanic effects’. Again, no specific research evidence is presented to support this position and there is no review of the literature (Marcus and Choi, 1994)\*.

A fourth paper, Lisle (Lisle, 2005)\* points to the potential problem of misinformed teachers applying the notion of VAK (Visual, Auditory and Kinaesthetic) to learning and notes that

*NLP information packages whilst developed with good intentions could be misused. Teachers using the VAK system can for example, after diagnosis perceive individuals as either visual, auditory or kinaesthetic learners thereby imbuing those labelled with those qualities.’*

(Lisle, 2005: 6)

However, Lisle concludes that:

*... reflective practice and indeed other learning styles such as VAK are useful if applied and re-evaluated through reflection-on-practice and not just applied as knowledge-in-use...*

(Lisle, 2005: 1)

To make her argument Lisle sites two papers by Geake (Geake and Cooper, 2003; Geake, 2005) neither of which make any specific references to NLP. Again, as with the Burton publication, the paper by Lisle has no discussion of the specific NLP research literature. Furthermore, Lisle fails to point out that most NLP writing emphasises the use of all modalities to support the achievement of outcomes rather than the separation of the senses (e.g. in the practice of well formed outcomes (see Churches and Terry, 2007, for an education related example). Similarly, Sharp, Bowker and Byrne (2008) in their criticism of Alistair Smith’s writings on accelerated learning and specifically the use of VAK in teaching, make a brief reference

“*Specifically, modelling seeks to identify and categorise behaviours and subjective experience in relation to areas such as: language patterns, body language, beliefs, internal dialogue, internal representations...*”

to NLP. Without making any direct criticism they discuss connections between NLP and Smith’s work – nowhere, however, do they directly discuss the NLP literature or research evidence. However, they do note that ALPS [Accelerated Learning in Primary Schools (see Smith and Call, 1999)] ‘is not NLP’ (Sharp, Bowker and Byrne, 2008: 302).

### Popular books on NLP and education

This section of the paper discusses the early literature on NLP and then reviews those NLP books that have been aimed at teachers, school leaders and other education professionals.

### The early NLP literature on therapy, hypnosis and personal development (1975–1985)

The first NLP publications date from the period when Richard Bandler and John Grinder (the co-founders of NLP) were a student and associate professor of linguistics at the University of Santa Cruz in California. These early writings focus on their use of the NLP process of modelling with hypnoterapists and family therapists such as Milton Erickson and Virginia Satir (Bandler and Grinder, 1975a; b; 1979; Bandler, Grinder and Satir, 1976; Grinder and Bandler, 1976). It is in these books that some of their core ideas about language and non-verbal communication are described. In particular, they discuss ideas about influencing with language and body language alongside approaches to the investigation of subjective experience and those internal mental processes which people are capable of being aware of. There was also a collaborative publication with Judith Delozier that expanded on their specific studies of the work of Milton Erickson (Grinder, Delozier and Bandler, 1975) and a more extended collaboration by all of the main early contributors to the development of NLP (Dilts, Grinder, Bandler, Delozier, Cameron-Bandler, 1979). Leslie Cameron-Bandler also produced an early NLP book on relationships (Cameron-Bandler, 1978). According to Dilts (1983b: 6) David Gordon and Maribeth Anderson made significant contributions to the development of NLP following Bandler and Grinder’s work with Satir,

both of whom produced NLP-related books (Gordon; 1978; Anderson and Gordon, 1981).

Modelling differs from other research-type methodologies as it seeks to identify the skills, attitudes, behaviours and subjective inner experience of effective people in a wide range of contexts in such a way as to make these attributes transferable and learnable (Bandler and Grinder, 1975b; Cameron-Bandler, Gordon and Lebeau, 1985; Dilts, 1998; Dilts, Bandler and Delozier, 1980). Specifically, modelling seeks to identify and categorise behaviours and subjective experience in relation to areas such as: language patterns, body language, beliefs, internal dialogue, internal representations (visual, auditory and kinaesthetic) and the order of internally processed experience (visual, auditory and kinaesthetic) as expressed through language patterns and subjective internal representations.

Two further books focusing on therapy and hypnosis appeared in the early 1980s (Bandler and Grinder, 1982; Grinder and Bandler, 1981), whilst three other publications by (or including) Richard Bandler as a writer (Bandler, 1985a; b; Dilts, Bandler and Delozier, 1980) took NLP more clearly into the territory of personal development. Another collaboration with John Grinder directly sought to apply NLP in a business context (McMasters and Grinder, 1980).

Parallel to these publications a number of Bandler and Grinder’s associates, and other people, began to produce similar books with an increasing emphasis on the wider applications of NLP (e.g. Dilts, 1983a; c). Dilts (1983a), in particular, sets a precedent for describing NLP as a technology. These applications include: personal development (Cameron-Bandler, 1984; 1985; 1986; Linden and Stass, 1985; Yeager, 1985), the concept of modelling competence (Cameron-Bandler, Gordon and Lebeau, 1985), communication skills (Lewis, Byron and Frank, 1982; Laborde, 1985) and the application and use of metaphor in a range of contexts (Johnson and Lakoff, 1980; Bretto Millner, 1985). Other publications included the application of NLP to areas such as sales (e.g. Moine and Herd, 1984), leisure counselling (Gunn, 1981), health care (King, Novik and Citrenbaum, 1983; 1984), therapy

(Hampton-Turner, 1981; Lankton, 1979), the legal profession (Smith and Malandro, 1985) and influencing in general (Elgin, 1980; 1983; Laborde, 1983; Moine and Herd, 1984; Richardson and Margoulis, 1981; Mathes, 1982).

### The popular NLP book literature for teachers and schools

Despite the increasing profile of NLP in teaching (a recent Google search produced over 1,320,000 results<sup>10</sup>), and the extensive number of publications which cover the application of NLP in other helping professions and for personal development, the book literature on NLP related to schools and teaching remains small compared to the number of general publications on teaching and learning and classroom practice. To date there are 28 books that overtly present ideas from NLP in the context of education, learning or teaching and 3 book chapters. In addition, we identified at least a dozen publications that draw heavily on the NLP model without making explicit or detailed reference to it.

The first NLP publication to focus on teachers and classroom practice appeared in 1982 (Harper, 1982), although an earlier publication had already applied NLP and Rational-Emotive Therapy to the development of self-esteem with children and teenagers (Anderson, 1981). Harper's book contains 38 weeks' worth of short daily activities for teachers and for use with children in the classroom. This was followed by a publication by Robert Dilts that included discussions about NLP and learning, alongside communication and change (Dilts, 1983b) and contained a specific chapter on NLP in Education (Dilts, 1983b) originally written in 1981. Also in that year Sidney Jacobson published the first of three extensive volumes on NLP and education (Jacobson, 1983; 1986a; b). The first of these included a wide range of discussion about how NLP could be applied in education with a focus on understanding the learning process from an NLP perspective.

Jacobson's books (1983; 1986a; b) are more technical in their discussions of NLP and reference the writings of Gregory Bateson (Bateson, 1979) as well as Bandler and Grinder's work. Bateson is frequently suggested as the inspiration for many of the early ideas about learning that have been incorporated into NLP (see for a discussion Tosey and Mathison, 2009). Two other early publications are specifically focused on teaching and learning (Cleveland, 1984; Reese *et al.*, 1985).

A total of 22 other books were published over the following 24 years. The majority of these cover classroom teaching and learning in general, although there are specific texts covering areas such as the teaching of music and performance skills (O'Connor, 1987; Bushwell, 2006), the teaching of English as a second language (Revell and Norman, 1997; 1999; Rinvolucris and Baker, 2005), spelling and dyslexia (Hickmott and Bendefy, 2006), school leadership (Mahony, 1999) and a revised and republished version of Harper (1982) – as Lloyd (1989). In relation to school leadership the second edition of Terry Mahony's book (Mahony, 2004) relates NLP to the National Professional Qualification for Headship and the six key areas in the National Standards for Headteachers (DfES, 2004):

- Shaping the Future
- Leading Learning and Teaching
- Developing Self and Working with Others
- Managing the Organisation
- Securing Accountability
- Strengthening Community

Terry and Churches (2009) devote a large section of their book to school leadership, including sections on leadership behaviours and coaching with NLP as well as school improvement. In an earlier book (Churches and Terry, 2007) they point to the potential of NLP approaches to explore the relationship between values and behaviour to support school improvement in areas such as the

“Two publications have specifically focused on teaching NLP to children, or contain substantial sections on this area (Spohrer, 2008; Terry and Churches, 2009).”

moral and spiritual dimensions of school leadership (West-Burnham 2002; West-Burnham and Huws Jones, 2007) and to support the development of key leadership behaviours aligned with the notions of moral purpose in education (Fullan, 2001; 2007).

Robert Dilts and Todd Epstein describe the NLP spelling strategy (a visual approach to learning to spell) in detail in their book *Dynamic Learning* (Dilts and Epstein, 1995) alongside a wide range of other suggested approaches to enhance learning. In relation to the spelling strategy, they quote several studies indicating the effectiveness of the approach. These include research by Thomas Malloy at the University of Utah Department of Psychology who carried out studies with groups of 'average' spellers. The first group was taught the NLP spelling strategy (looking up and to the left), the second a sounding-out strategy using phonetics and auditory rules, and the third group was used as a control and no new strategies were given. The visual recall of the spellers is reported as having improved by 25% with 100% retention one week later. The second group, who had been taught the auditory strategy, improved 15%, although this score dropped by 5% in the following week. The control group showed no improvement.

In another study in 1985 at the University of Moncton in New Brunswick in Canada (in Dilts and Epstein, 1995) similar results were found: results suggested that looking up to the left enhances spelling and is twice as effective as simply asking students to visualise words. Furthermore, looking down to the right appeared to inhibit success. The original research by Thomas Malloy (Malloy, 1987; 1989; 1995) is discussed in the literature review in this publication.

There have been three publications by Michael Grinder (Grinder, 1991; 1993; 1996) the brother of NLP co-founder John Grinder, and several general publications on (Beaver, 2002; Blackerby, 1996; Dilts and Epstein, 1995; Freeth, 2003) or which contain substantial sections on NLP and learning (McKinnon, 2007). Other publications have presented a general focus on the classroom and the management of behaviour and/or learning (e.g. Mahoney, 2002/2007) with two emphasising

the presentation and communication skills elements of NLP (Churches and Terry, 2007; Terry and Churches, 2009) seeing NLP as a useful enhancement to delivering established pedagogy rather than as a pedagogy itself.

Two publications have specifically focused on teaching NLP to children, or contain substantial sections on this area (Spohrer, 2008; Terry and Churches, 2009). Terry and Churches (2009), in particular, connect NLP strongly with the notion of developing emotional and social literacy with children, a tradition which, it can be argued, can be traced back to the earliest of (Education-related) NLP publications (Anderson, 1981). Similar approaches have been applied to books about parenting with NLP (Sargent 2006).

In relation to the research evidence about emotional and social literacy and achievement, there is now growing evidence of a link between aspects of emotional intelligence (particularly self-motivation and low impulsivity [self-control] and attainment – as well as a growing emphasis on the emotional aspects of learning in thinking about school improvement (see for example, Vidal Rodeiro, Bell and Emery, 2009).

Other recent publications include a pocket book that focuses on NLP-related classroom activities (Hodgson, 2009) and general active learning approaches and a text focusing on behaviour and learning (Elston and Spohrer, 2009). Alongside the full book publications there are three chapters on NLP in books on teaching and schools. These cover self-directed learning and NLP (Allgood, 1997), the use of NLP to support communication skills in the area of educational leadership (Tomlinson, 2004) and teaching and learning in general (Gow, Reupert and Maybert, 2006).

As in other areas of NLP, such as personal development and therapy, some books make strong use of NLP without specifically discussing which NLP techniques have been used in any detail. This is also the case with the three books by Michael Grinder (1991; 1993; 1996). Some make passing references to NLP (Best and Thomas, 2007; Churches, 2009a; De Porter, Reardon and Singer-Nourie, 1999; Ginnis, 2002), other books essentially

<sup>10</sup>Google Advanced Search: *Neuro linguistic programming AND teachers OR teaching*, 12 July 2009. Compared to only 255,000 reference for: *Accelerated Learning AND teachers OR teaching*, on the same day and 1,560,000 references for: *Learning styles AND teachers OR teaching*.



“NLP has not stayed static as a concept, or set of methodologies, and has been constantly evolving since the early publications.”

rework elements of the model using simpler language and explanations without making reference to NLP itself (Owen, 2001; Beere, 2007; 2008a; 2008b). One notable example is Jensen (1995) in which specific NLP terminology is used in a slightly modified way throughout the book but without any clear reference to the origin of the material being used. This practice of reworking NLP content without mentioning the origin of the approaches is a frequently occurring process generally, as Tosey and Mathison (2007) note:

*Ponting (2006) identifies that practitioners often use NLP without naming it as such, prominent reasons being its negative connotations for clients, a desire to avoid jargon, or the fact that NLP is just one ingredient in an eclectic form of practice.*

(Tosey and Mathison, 2007: 2–3)

In many ways, the popular literature on NLP in education suffers from similar inconsistencies in terminology and range of content as in the wider NLP literature. This is perhaps to be expected as NLP has remained a largely non-academic area and as Churches and West-Burnham point out,

*NLP has not stayed static as a concept, or set of methodologies, and has been constantly evolving since the early publications. In this sense it has many of the characteristics of a ‘community of practice’ (Wenger, 1998) rather than a specific theory or set of precepts.*

(Churches and West-Burnham, 2009: 127)

Indeed, you are more likely to have learned about NLP in detail from attending a training course than from reading the literature extensively. In a way, the learning of NLP can still be considered a largely oral tradition and it has been estimated that around 30,000 people have attended NLP practitioner training courses in the UK in the past 25 years (Tosey and Mathison, 2009).<sup>11</sup> This is a notable statistic, bearing in mind that NLP practitioner varies in length from 7 to 31 days depending on content, provider and level.<sup>12</sup>

<sup>11</sup> Based on personal communication with the Association for NLP.

<sup>12</sup> INLPTA (International NLP Trainers Association) accredited training, for example, consists of three levels of training and frequently the following number of days training: Diploma (4 days), Practitioner (12 days) and Master Practitioner (15 days).

Alongside this, however, there has been a growing, if small, academic interest in NLP in England during the last ten years. In 2008 there were known to be approximately ten doctoral studies that had NLP as a substantive focus under way in established UK universities. Of these, at least three were in the discipline of education – at the time of writing, one of these has been completed successfully at the University of Bath (Day 2008a). This form of research-evidenced enquiry into NLP still remains by and large the exception. As Tosey and Mathison point out:

*NLP practitioners seldom see NLP and its community as the potential focus or ‘subject’ of research. NLP literature has rarely (to our knowledge) attempted to locate NLP in its social and cultural context, or to review its discourses and salient features.*

(Tosey and Mathison, 2007: 5)

The NLP education writing is no exception to this and most books are content to self-reference to other NLP books. There are, however, examples from early publications of attempts to connect to wider psychological literature through some academic referencing (Jacobson, 1983; 1986a; 1986b) and the inclusion of extended bibliography (Reese *et al.*, 1985). More recently, some writers have related ideas and strategies from NLP to current concepts from neuroscience and cognitive psychology (e.g. Churches and Terry, 2007; Wake, 2008).

Churches and Terry (2008) contains over 100 academic references in a series of short literature reviews of research from recent psychology and neuroscience that they suggest can be seen as having a parallel with ideas from NLP. They particularly suggest the relevance of research into areas such as: automaticity, hypnosis and consciousness (e.g. Brown and Oakley, 2004), the effect of all sensory visualisation in hypnosis (Kalisch *et al.*, 2005), mirror neurons (Dapretto *et al.*, 2006; Rizzolatti *et al.*, 1996; 2001; Tognoli *et al.*, 2007), micro facial expressions (Ekman,

2003), the effect of positive mental imagery and self-talk on performance (Neck and Manz, 1992; Pascual-Leone *et al.*, 1995; Patrizi, 1982; Taylor and Shaw, 2002) and some aspects of the neuroscience of memory (Miller and Matzel, 2000; Hafting *et al.*, 2005; Knierim, 2007). They also make strong reference to aspects of the teacher and school leader effectiveness evidence (e.g. Brophy, 1981; Fullan, 2007; Harris, 1985; Leithwood *et al.*, 2006; Muijs, 1998; Muijs and Reynolds, 2005; West-Burnham and Ireson, 2005). Herein lies one of the difficulties for NLP in connecting with the academic community and particularly the scientific psychological and neuroscience community. For although many areas of NLP can be discussed in relation to advances in areas of research such as Social Cognitive Neuroscience (Blakemore, Winston and Frith, 2004; Lieberman, 2007) and some areas of biological psychology (Breedlove, Rosenzweig and Watson, 2005) the language of NLP and particularly the language of early NLP writing is far from being completely aligned with this.

### Some initial conclusions based on the literature

In this section we conclude by looking at three areas that we think are relevant to making some final conclusions about the nature of NLP as a field of study: criticism of NLP; language, therapy and learning; and VAK (Visual, Auditory and Kinaesthetic) sensory modalities and NLP.

#### Criticisms of NLP

As we discuss in our review of the popular book literature on NLP, the earliest NLP writing focused its attention on therapy, particularly family therapy and hypnosis (Bandler and Grinder, 1975a; b; 1979; Bandler, Grinder and Satir, 1976; Grinder and Bandler, 1976). It is from the field of clinical hypnosis (Heap, 1988) that the strongest criticism of NLP has emerged. Heap’s ‘interim’ review of NLP is the most frequently quoted and referred-to publication that argues the case against the effectiveness of NLP.

Heap’s paper is, however, now over 20 years old, and it is worth noting that other equally respected experts in the academic study

of hypnosis (e.g. John Gruzelier, Stephen Lankton and Michael Yapko) have presented occasional more positive views of NLP. These include evidence of the effectiveness of specific hypnosis-related NLP strategies (see e.g. Dobbin *et al.*, 2004; Gordon and Gruzelier, 2006), aspects of the model in general (e.g. Yapko, 2003) and elements of NLP derived from Ericksonian hypnosis (Lankton, 2008). Although Heap has published a more recent article, in a non-peer reviewed publication [*Skeptical Intelligencer*] (Heap, 2008), his observations on the literature have not in fact moved on significantly from his 1988 publication. For wider discussions about Heap’s 1988 paper see Tosey and Mathison (2009).

Despite being critical of NLP, Heap promotes, in his scholarly publications (such as *Hartland’s medical and dental hypnosis* (Heap and Kottiyattil, 2002)), techniques from NLP and even some core philosophy of NLP without mentioning their origin and/or parallel use. Specifically, Heap promotes the benefits of a wide range of techniques that are to be found in NLP but without citing the NLP-related source of these (we have included NLP literature sources in square brackets below). In particular, Heap discusses anchoring [Bandler and Grinder, 1979] both positive and negative (Heap and Kottiyattil, 2002: 139), anchoring for positive feelings (pp.138; 376; 402; 405), relaxation (p.401) and in relation to post-hypnotic suggestion (pp.141–142). Alongside this, there are discussions of modelling [Bandler and Grinder, 1975b; Cameron-Bandler, Gordon and Lebeau, 1985; Dilts, 1998; Dilts, Bandler and Delozier, 1980] in relation to learning (p.261) and the Yes set (p.115) [Grinder and Bandler, 1981].

Heap and Kottiyattil (2002) also contains numerous examples of indirect forms of influential language with the same structures as those discussed by Grinder and Bandler (1981). Although this is, of course, the case with hypnosis in general (see Hammond, 1990; Yapko, 1995) because of the origin of some NLP areas such as the Milton model. There is also a section of text in Heap and Kottiyattil that describes in nearly exact detail the NLP concept and presupposition that ‘the map is not the territory’ [Grinder and Bandler, 1976] even using the NLP term ‘representation’ [Bandler and Grinder, 1975a] in the same way



(again with no mention of NLP). These are concepts, including their origin in writings by Korzybski (1933/1934) and Bateson (1972), that can be traced back to the earliest NLP publications by Bandler and Grinder (1975a; Grinder and Bandler, 1976) and the first application of such ideas to therapy.

*Each one of us does not experience directly the 'real world'. All we ever experience is our representation of our world. We construct this from the raw data that comes through our senses and from our previous experiences that lead us to have certain expectations about the world. Our representations of the world may be compared to a map. Our map of the world tells us how we should act, what we should expect, what choices we have, what are the consequences of such choices, what is worth doing and what is best avoided, and so on. Each person's map is unique.*

(Heap and Kottiyattil, 2002: 274)

Compare this, for example, with the following from the opening section of *The Structure of Magic II* published in 1976 (Grinder and Bandler, 1976) which builds on the concept first discussed a year earlier (Bandler and Grinder, 1975a):

*Human beings live in a 'real world'. We do not, however, operate directly or immediately upon that world, but, rather, we operate within that world using a map or a series of maps of that world to guide our behaviour within it. These maps, or representational systems, necessarily differ from the territory that they model...*

(Grinder and Bandler, 1976: 3)

Or for example, the following section from *Neuro-linguistic programming for Dummies*, one of the most popular NLP books in recent years which notes the influence of Korzybski – a writer which Bandler and Grinder acknowledge as the source of this concept within their writings (Bandler and Grinder, 1975a; Grinder and Bandler, 1976).

*One of the first presuppositions is that **the map is not the territory**. This statement was published in 'Science and Sanity' in 1933 by Korzybski, a Polish count and mathematician. Korzybski was referring*

*to the fact that you experience the world through your senses (sight, hearing, touch, smell and taste) – the territory. You then take this external phenomenon and make an internal representation of it within your brain – the map.*

(Ready and Burton, 2004: 18)

Despite the fact that there is a developing supportive research literature about NLP (see Tosey, 2009) critical commentaries persist. Rowan (2009) suggests that NLP is simply a collection of ideas from psychology; others, such as Roderique-Davies (2009) (in the most recent academic criticism of NLP) have even gone as far as to describe NLP as a form of cult. As far as we are aware, however, there has never been a Jonestown-type NLP commune anywhere in the world and the vast majority of NLP training takes place in rather bland training rooms as part of corporate learning and development programmes.

Roderique-Davies' paper conveniently ignores the published research from a range of fields (not just education) that shows evidence in support of the effectiveness of NLP if not its theoretical descriptions. Doctoral research projects on NLP that are completed, and/or currently under way, go without mention. There is also no discussion of key recent journal articles on the use of NLP as a research methodology to explore and map first person consciousness (Mathison and Tosey, 2008a; b), the recent paper that appeared in the *Journal of Consciousness Studies* (Mathison and Tosey, 2008c) and analyses by Petitmengin (2006) in the journal *Phenomenology and the Cognitive Sciences*.

The key criticism of NLP made by Roderique-Davies, and the claim that it is 'cargo cult' psychology seem to revolve around the methodology underpinning NLP research – which as we have noted above emphasises subjective experience rather than objective measurement and as such will always be at odds with some areas of psychology – although perhaps less at odds with qualitative researchers. Furthermore, Roderique-Davies dismisses the potential to explore NLP from an education research perspective implying that education is too 'informal' a research domain for evidence to be valid and reliable.

*“Perhaps one day the practice of hypnosis, and the deep relaxation that it can produce, will be exploited to increase learning and productivity.”*

Such polarising perspectives are not where we are coming from and we would not wish to see NLP used as a way of returning to the old days of crude quantitative versus qualitative research disagreements between fields like education and psychology. Our view is that NLP is a transdisciplinary field of study (in that it draws from academia as well as other areas) (Gibbons *et al.*, 1994) and because of its unique approach to the mapping of consciousness and subjective experience has the potential to unify different research domains.

### Language, therapy and learning

NLP has from its inception drawn heavily on the use of suggestion and 'presupposition' in hypnosis and therapy to provide a framework to explain the nature of influencing with language, in general (Bandler and Grinder, 1975a, b, Grinder, Delozier and Bandler, 1976; Grinder and Bandler, 1981). Presuppositions are the covert suggestions or implications that are unsaid in influential language but nonetheless are communicated. In relation to the neuroscience of hypnosis, Blakemore and Frith in *The Learning Brain* (Blakemore and Frith, 2005) suggest that:

*Perhaps one day the practice of hypnosis, and the deep relaxation that it can produce, will be exploited to increase learning and productivity. Of course, this will not work for everyone. And, of course, it could be exploited in negative ways. But just*

*as hypnotizable people can gain a lot in therapy, so they might gain a lot from the use of positive suggestions in education.*

(Blakemore and Frith, 2005: 177).

As Blakemore and Frith note (2005), there is a normal distribution curve of hypnotisability in the general population. About 15% of people are highly susceptible to hypnosis and 15% are not. There is, as far as we are aware, no recent research into hypnotisability and learning per se and therefore, in this sense, the extent to which suggestive language can be said to have effects across this continuum in an educational context remains unexplored. However, other contexts, such as advertising, have yielded evidence, for example, that the hypnotic-suggestive communication level of advertisements is a crucial variable in advertising effectiveness and the evaluation of advertised brand, evidence which emerged without taking into account the relative hypnotisability of the different participants (Kaplan, 2007).

The contention of Richard Bandler and John Grinder (the co-founders of NLP) was that the patterns that they had modelled from Milton Erickson (the hypnotherapist) were effective in influencing in general (Grinder and Bandler, 1981). They even went as far as to suggest that, from the perspective of linguistic presuppositions (the embedding of suggestions within language) 'all communication is hypnosis' (Bandler and Grinder, 1979: 100). See example below.

#### EXAMPLE:

#### Using NLP in Education (Example from Churches and West-Burnham, 2008: 6–7)

##### Influential language in the classroom

Influential language patterns emerged from the research as a key area of potential benefit to teachers. This was not just in terms of behaviour management but also in relation to the development of positive relationships, the positive reinforcement and encouragement of learning, motivation and questioning skills. [Extracts below from *Times Educational Supplement* (Churches and Terry, 2008: 28–29)]

*A key concept to grasp, before you begin, is the notion of presupposition. Presuppositions are the hidden meanings in sentences, phrases or individual words and work covertly or indirectly. For example, if we were to say: 'Either now or in the next few seconds, you can think of a time when using the right words, at the right time, would have been useful to you', you are likely to do just that.*

Continued...

EXAMPLE: (Continued)

This is because the first part of the sentence presupposes that you are going to do it. This particular pattern is called a **double bind** and is useful when you want to limit the possibilities the person you are talking to will have. For example, in the classroom you might say: 'John, would you like to start by doing the questions or the diagram first?' The presupposition is that John will start work now, whichever way he chooses to do it.

**Covering all bases** is a language pattern that can help to avoid this. It works by making sure that all people are included. For example, you might say: 'I know that some of you have already done some work on this with your last teacher, others are coming to this new and some of you have already developed your interest in this area.'

Another is the **yes set**, commonly used by public speakers. After receiving three undeniable facts one after another we are more likely to take the next statement as true also. For example: 'It's 10am, we've finished the first task, we have 30 minutes left so now would be a good time to think of some good questions that we can discuss, wouldn't it?' Note the 'wouldn't it?' at the end of the sentence. This is a separate but linked move, called a **yes tag**, and it's difficult to say no to when placed at the end of a correct sentence, isn't it? If you nod while you say a yes tag this increases its effectiveness. Yes tags are particularly effective after explaining rules, to reinforce the point and gain agreement.

(Churches and Terry, 2008: 28–39)

Of course, in the classroom, some forms of communication will be more effective than others, with the variables probably relating to the suggestibility of the individual being communicated to and the skill in constructing suggestive language on the part of the person seeking to do the influencing. Alongside this, it may be that social conformity effects and expectancy play a part in the effectiveness of such approaches. Hypnotic effects are generally perceived to be a function of expectancy, attitude and aptitude (hypnotisability). See Churches (2009b) for a theoretical discussion about hypnosis and charismatic leadership.

### VAK (Visual, Auditory and Kinaesthetic) sensory modalities and NLP

Not all writers consider the simplistic application of VAK preference [primary representational system] (one small element of NLP) to learning style to be part of the core literature on NLP. Such very simplified conceptions bear little relation to the complex (if largely unresearched) concept of using VAK to model 'strategies' as is discussed in Dilts (1983b). For example, Churches and Terry (2007) present a more

sceptical view about learning styles, preferring to return the concept of sensory preference to their original definition as a means of influencing, modelling and building rapport but not as a form of learning style. Indeed, the notion of VAK learning styles appears to have evolved in parallel with the work of Bandler and Grinder and not directly from it. It is worth noting, for example, that 'highly hypnotisable people are often very good at forming visual images' (Blakemore and Frith, 2005: 177) and imagery appears to play a key role in the definition of different hypnotic types (Pekala and Kumar, 2007). It is this type of conception, of phenomenological or subjective experience (Dilts, Bandler and Delozier, 1980), which NLP seeks to discuss, explain and make use of rather than a discussion of brain structures.

Putting aside the arguments about whether VAK learning styles are the same as NLP VAK preference (we contend that they are not), recent University of Pennsylvania neuroscience evidence (Kraemer, Rosenberg and Thompson-Schill, 2009) appears to move the general debate about VAK on from some of the views expressed by Geake and others (Geake and Cooper, 2003; Geake, 2005; Geake, 2008). Kraemer and colleagues' study,

“... it may be the case, given proper training or motivation, that an individual can effectively learn to adopt a new cognitive style if doing so would facilitate problem solving in a specific domain.”

published in the *Journal of Neuroscience*, used fMRI (functional magnetic resonance imaging) and in fact suggests that people who consider themselves visual, as opposed to verbal, tend to convert linguistically presented information into a visual mental representation.

Kraemer and colleagues' research (Kraemer, Rosenberg and Thompson-Schill, 2009) demonstrated that the more strongly a person identified with the visual cognitive style the more activated their visual cortex became when reading words. The opposite was also the case. These results led the researchers to conclude that 'modality-specific cortical activity underlies processing in visual and verbal cognitive styles' (2009: 3792). They further suggest that:

... it may be the case, given proper training or motivation, that an individual can effectively learn to adopt a new cognitive style if doing so would facilitate problem solving in a specific domain. For example, a student who prefers the verbal style may be able to learn to visualize in certain situations where it would be helpful for a specific subject, such as organic chemistry. Future research on this topic may be able to suggest new and effective teaching methods that are tailored to the unique details of specific contexts and to the unique characteristics of specific individuals.

(Kraemer, Rosenberg and Thompson-Schill, 2009: 3797).

Such evidence does not contradict, as such, Geake's argument that modalities cannot be seen as separate as they 'talk' to one another (as it were) in an integrated way and that sensory integration happens very early on in the process (see e.g. Kayser, 2007; Macaluso and Driver, 2005; Kayser *et al.* 2005). Rather Kraemer and colleagues' paper seems to suggest a middle ground (i.e. that in 'talking to each other' the different modalities do so in a way that matches a learning style preference). They suggest that this is evidence for compensation in the event of a stimulus not being in a preferred form. This does not, of course, demonstrate evidence for the differentiation of teaching method by learning style preference nor necessarily affect the arguments put forward by Coffield and colleagues (Coffield *et al.*, 2004a) in their questioning of the use of learning styles in

general. However, some studies (e.g. Hillin, 1990; 1991; Burton, 2004; Zhang, N. and Ward, A.E. (2004)\* do present support for the application of VAK models as defined in NLP.

From an NLP perspective what Kraemer and colleagues describe, in terms of learning to adopt a different cognitive style (to one's preference) where appropriate for the effective achievement of a specific task, is the essence (and philosophy) behind some forms of NLP modelling and the concept of the role of VAK modality within what are called 'strategies'. Strategies is the NLP term for people's subjective experience of thinking in modalities whilst doing something. In this sense, the 'purist' NLP perspective differs from the 'brain-friendly' learning styles perspective in that NLP suggests the modelling, learning and adoption of new strategies by an individual to compensate for and build on preferences as an aid to learning, in contrast to the adaptation of whole class teaching styles or differentiation by preference on the part of teacher.

A good example of the above is the spelling strategy. This essentially advocates a largely visual approach to spelling irrespective of personal preference within an all-modality framework of activity. NLP literature proposes that the order of modalities is important in relation to effectiveness with that order varying in relation to the domain and type of activity. As discussed above, evidence on the effectiveness of the spelling strategy can be found in Kennedy and And (1994), Malloy (1987; 1989; 1995) and Loisel (1985).

### So what type of knowledge is NLP? Some final thoughts about NLP, psychology and recent neuroscience

Although there are some elements of NLP that are clearly applications from psychology (e.g. anchoring – which can be seen as a practical approach to using Pavlovian conditioning with people), there are some key ways in which NLP differs from much mainstream psychology. In particular:

- NLP accepts the validity of first person descriptions of the inner experience of



what happens in people's minds whilst they are doing things (the so-called phenomenological perspective), rather than relying purely on objective observation and measurement (see for NLP-related discussions, Petitmengin, 2006).

- Philosophically, but not methodologically, the above means that NLP has more in common with some recent ideas from Social Cognitive Neuroscience (Blakemore, Winston and Frith, 2004; Lieberman, 2007) and other areas of neuroscience and psychology that are interested in consciousness (Varela, 1996) [neurophenomenology] and altered states/patterns of consciousness (Pekala and Kumar, 2007) [one form of psychophenomenology]. See Mathison and Tosey (2008a) for discussions about other 'psycho-phenomenological' approaches (e.g. Vermersch, 2006) that have been combined with NLP within a research context.
- There are elements of the NLP model that are unique to NLP. For example, submodalities – the subtle distinctions and differences in people's internal imagery (e.g. whether an internal representation is moving or still, coloured or black and white etc.).
- In NLP, context is perceived as a form of stimulus rather than simply as a confounding variable. This acceptance and indeed the inclusion of the study of context as a key factor in behaviour is derived in NLP from Bateson's work (Bateson, 1972).

- Where much psychology begins with theory and then seeks to establish theory through experimentation. NLP is, in many ways, a practical applied body of knowledge seeking a theory, perhaps the reason it is more frequently associated, by practitioners, with the term 'technology' rather than science. Again, this focus on practitioner-led enquiry aligns NLP with notions of reflective enquiry and the development of networks and communities of practice.
- Finally, in relation to hypnosis, although the approaches and processes of hypnotic induction within mainstream classical hypnosis and NLP are similar, the NLP model of defining the structure of suggestive and presuppositional language remains the most detailed definition of the structure of suggestion. This said, there are other texts that explore the structure of hypnotic language from other and/or related perspectives (see e.g. Hammond, 1990; Yapko, 1995; Battino and South, 1999).

## Appendix 2 – The teacher case study write-ups

“The teachers decided upon a general focus of using various NLP techniques (specifically 'positive language' to move pupils from a negative emotional state to a more positive one), across whole classes of Year 3 and 4 pupils.”

### Case Study 1 – Confidence and Attitudes

Fiona MacGregor and Robin Charlton are KS2 teachers at Stobhillgate First School.

#### Areas of NLP evaluated in the action research

- Milton model language patterns
- Visualisation
- Well formed outcomes

#### Focus

Stobhillgate is a school for 4 to 9 year olds, with a school roll of approximately 180 pupils. The teachers decided upon a general focus of using various NLP techniques (specifically 'positive language' to move pupils from a negative emotional state to a more positive one), across whole classes of Year 3 and 4 pupils. They also decided to use NLP language techniques with colleagues across the school to observe whether these had any impact upon relationships with individual members of staff and the pupils. In addition two pupils (one from Year 3 and one from Year 4) were targeted for individual focus.

#### Research Plan

To use NLP positive language techniques to:

- encourage more confidence and self-esteem with a Year 3 boy
- improve the behaviour and attitude of a Year 4 boy
- 'notice what we noticed' with the attitudes of Year 3 and 4 classes, and to engage the class as a whole into a positive state where the children would feel enthused and able to achieve the goals set for them
- develop positive relationships with colleagues across the school
- implement the Research Plan.

#### Implementation of the Research Plan

##### A Year 3 pupil

This child was working above average in the class; he was a very able mathematician and

would join in actively in numeracy lessons. In other subjects he tended to take more of a back seat letting other children answer and opting out of any drama or reading aloud if he could. He was due to receive an award in front of the school and voiced his concern at receiving this. He asked if he could avoid the assembly and instructed his parents not to attend. After receiving the certificate in front of everyone this child came to talk to me and identified how he felt as he went through walking up to collect the certificate (he said he felt hot and that he couldn't look up because he was aware that everybody was staring at him: this resulting 'fear' 'froze' him).

I started to use some of the techniques that had been discussed during one of the NLP sessions and worked with this child daily. His teacher tried getting the child to be more specific in identifying the particular areas he was having problems with or lost confidence in. Often he would say, 'I don't get this, I can't do it' and his head would go down and his emotional state would then make him unable to take in instruction. We started trying to intercept this behaviour and also using the 'yet' word with him (e.g. 'You can't do this yet...') – an approach from the influential language aspects of NLP. He responded very quickly to the attention given and started to realise that he could do it without much of a problem.

A dance company visited the school after a couple of weeks of us trying these techniques with this child and he joined in all of the session. When asked to perform he did say he didn't want to, but after we had talked it through with him and encouraged him to believe he could do it, and visualising himself finishing it he had a go and danced the whole sequence with his head held high. This was a considerable achievement for this child and at the end of the day he said to his Grandma that it had been one of the best days of his life. This child still has the odd confidence 'wobble'; however, he has joined the drama club, stood up and demonstrated dance routines to the rest of the school, competed for the school in sporting events and announced at the



beginning of this year that he was going to join the choir as he hadn't tried that yet.

#### A Year 4 pupil

During his final year at the school a Year 4 boy's behaviour became increasing unacceptable during breaktimes and lunchtimes. Although the pupil's behaviour in his class was generally acceptable and the pupil/teacher relationship was reasonable, outside of the classroom, during the less structured times of breaks, his behaviour was often aggressive (towards other pupils) and disrespectful (towards certain female members of staff). The dilemma that his teacher had was that the pupil would regularly re-enter the classroom from the care of lunchtime supervisors needing to be 'dealt with' by his class teacher.

These regular disturbances and need for follow-up disciplinary measures damaged the previously sound relationship and led to increasing tension and frustration within the classroom between teacher and pupil. Following the initial NLP training the teacher began to analyse and reflect upon his speech towards the pupil and found that through 'frustration' it often descended to a negative level. In order to gain a positive change of state the teacher actively slowed down his process of talk to be able to observe how certain forms of language affected the pupil.

The use of positive language (rather than a negative 'telling off') and the removal of 'don't' had immediate benefits and the disciplinary 'moments' soon become more controlled and less emotional for the pupil and teacher alike; the focus of these situations became more reflective for the pupil (about his own behaviour) rather than a confrontation about 'whose fault (i.e. someone else's) it was' for the incident. This resulted in the pupil being able to settle down more quickly and engage in learning. Unfortunately despite these positive benefits in the classroom the pupil's behaviour and attitude in the playground failed to improve to any significance.

#### General work with Year 3 and 4 classes

The teachers worked with their classes and used positive language techniques and phrases such as: 'I know you're curious...', 'Just imagine...', 'It's good to...' (Teaching

Influence Cards by John Carey). They set out to avoid negative language such as 'don't' and 'can't' and to encourage the pupils not to use it themselves. Initially this change in language felt unnatural and laboured and both teachers identified that the need to 'compose the language' slowed down their actual speaking. However, this planned approach (before speaking) showed positive and mostly immediate benefits in the attitudes and beliefs of the pupils; additionally the teachers both became more reflective about their own practice. As the teachers developed this positive language approach they both found that it became more natural and the process was quicker.

One of the teachers noticed that sometimes the language used could be misinterpreted by some pupils or its meaning was ambiguous; through reflection with his colleague the teacher recognised that this sometimes led to confusion with some pupils; consequently he revised and simplified certain instructions and language patterns to ensure that they would only result in the desired outcome.

#### Relationships with colleagues across the school

The teachers initially observed that some other members of staff were sceptical about the concept of NLP. However this was overcome through some INSET training, which was received with enthusiasm. One of the research teachers identified that when communicating with some members of staff that their own language often used negative humour (sarcastic) and the messages that this gave were often unclear, which resulted in uncertainty and sometimes confrontation. The simple recognition and reflection of this fact resulted in the teacher actively changing their language patterns to ensure that their language created a 'positive state' rather than a negative one. The beneficial results in relationship improvements were immediate.

#### Summary of impact

Although much of what the teachers noticed was subjective they found that by implementing some of the NLP techniques, it gave much benefit within their own classrooms (both generally with a whole class and with specific individuals). Additionally the teachers identified that by

*“It has also become apparent that NLP can have a direct impact on pupil welfare as it allows the practitioner a great understanding of pupil behaviour without the need to know the details of the problem.”*

using positive language with their colleagues the ambience in the staffroom was much less stressful and much calmer. One of the teachers recognised that their relationship with some members of staff became more professional and genuine, rather than the sarcastic (negative) banter that it had been previously. Both teachers recognised that they have become more observant of other people's behaviour and language, and this has led to more reflection on their own actions and language.

Following the NLP training both teachers have undertaken additional reading about the subject. Anecdotally one of the teachers has used many of the NLP positive talk techniques in their own private life and it has benefited both family and social relationships.

## Case Study 2 – Improving Attainment

**Simon Potter** teaches at Tweedmouth Community Middle School.

#### Focus

Tweedmouth Community Middle School is in Berwick, Northumberland. The main reason I attended the NLP training was to learn more about how to build pupils' motivation for learning thereby impacting upon their behaviour, and so leading to an improvement in attainment. It has also become apparent that NLP can have a direct impact on pupil welfare as it allows the practitioner a greater understanding of pupil behaviour without the need to know the details of the problem. Added to this is the training of how to build rapport and the use of effective questioning – key skills in counselling.

#### Areas of NLP evaluated in the action research project

- Anchoring
- Meta model questioning
- Milton model language patterns
- Non-verbal communication
- Rapport
- Submodalities
- Well formed outcomes

#### Research Plan

The initial focus was to look at ways to improve the pupil's motivation; however, as the course progressed this was altered to look at different ways that information can be presented thereby making it accessible to all and challenging the 'I can't' culture. Through support from the coach and working alongside a peer who I had invited to attend the course with me, we focused on the key aspects of submodalities, effective communication (including body language; tonality; 'yes sets'; embedded commands; rapport and using effective language to elicit an expected response) and designer states. By putting these key skills into place it would allow the user to develop, build and strengthen learning styles approaches and contribute to improving pupil welfare.

#### Implementing the Research Plan

The initial plan was for myself and another colleague to attend the 4-day 'Leading Thinking' course. The course was made up of two sets of two days and it was during the break in between them that my plan was amended, because both I and my colleague realised that this course could have huge benefits to all involved (I say this from a personal experience whilst attending the course). It was agreed that we would hold a 'learning lunch' so that other staff who were interested could find out more. After a meeting with our coach we reviewed the plan again and it was decided that these skills should be implemented across the school. Our attendance on a further four days of training that enabled us to become NLP Practitioners was supported by the headteacher who asked that we provide feedback in a staff meeting – extending the plan to accommodate all colleagues, regardless of their role in school. The plan has been further modified as both I and my colleague felt that one staff meeting would be insufficient time to give to the skills we had learned, as such a session is to be set aside at the next in-service day.

#### Summary of impact

From a personal level I can say that this has been a life-changing experience. I have been able to change my way of thinking about a number of different situations; this has resulted in a much more calm approach to my family life. I have also used the skills acquired in both

“I created a state using an image of my son that made me smile and feel happy, and now when I hear this hymn I recall this image and can sing the hymn without getting upset.”

my personal and work life. The key skills I use are rapport and ‘noticing what I notice’, listening carefully and asking effective questions to promote thinking. I feel that I have a greater understanding of the way people (especially children) learn, interpret, process, reinterpret and restate/communicate information and it has resulted in me wanting to develop my understanding of NLP and psychology further.

My teaching practice has changed and I use more of the skills learnt in my lessons. For example, the use of embedded commands and tag questions promotes thinking both subconsciously and consciously and results in an immediate response.

The use of submodalities, and meta model questioning in an English lesson led to all pupils producing an excellent piece of creative writing using personification. I have a greater awareness of what I do in the classroom and why it works – before I would have just said that that was what I did and it worked for me. For example NLP states that you can anchor things to places (i.e. build an association between a specific state and a specific place in the classroom). I have always stopped the class in a specific way, using a countdown and moving to a specific spot in the classroom: this is an example of anchoring and the pupils were aware of this before. They knew that when I started to move to the place, that I was going to ask pupils for their attention. I have now taken this a step further and use different points in my classroom for different things e.g. a specific place for explaining and a specific place for discussing behaviour – this consistency has resulted in the pupils knowing the expectations before they are requested.

I feel that I have a greater understanding of the pupils I teach; why they behave in the manner they do; why they react the way they do, and how I can affect their emotional state (both positively and negatively). Through learning about rapport I am more competent at putting people at ease – being approachable, this has had benefits both inside the classroom with pupils and outside in meetings with parents, in particular in my new role as SENCO. I am also more aware of how my state can affect others and have learnt skills that I can use to change my emotional state and help others to change their state.

It is possible to create ‘designer states’ whereby the individual can choose to change their current state for one that will serve them better.

I have been working with a number of pupils helping them to create their own designer states; the principle is fairly straightforward and content is not important to know as long as the pupils know it. I ask them to think of a time when they were really happy and to visualise this; using meta-model questions the individual can embellish this situation, adding colours, sounds, temperature, etc. They can manipulate this image to make it stronger and move it closer to themselves, increasing the intensity of the experience. The individual – using a key word or a visual anchor, for example, can then anchor this state. This allows the person to ‘carry’ the state with them (metaphorically) and use it when they need to. Again, I have had personal experience of this – I used to get upset every time I heard a particular hymn in church: it has the lines ‘God gave us ears so we could hear’. My eldest son is deaf and this line always brought a tear to my eye. I created a state using an image of my son that made me smile and feel happy, and now when I hear this hymn I recall this image and can sing the hymn without getting upset.

Of course not all states are beneficial to learning. For example if a pupil is angry or annoyed then this state is inappropriate for learning. For an NLP practitioner, through the use of rapport, it is possible to break this state and put in place a more productive state. I tend to use humour to break the state and through well thought-out questions, allow the pupil to come up with other alternatives that perhaps they had not considered. A specific example of this was when one child, who was upset, told me that he had no friends. Using a ‘surprised and slightly unbelieving’ tonality I asked him ‘what, no friends?’ His reply was ‘of course not, no friends!’ as if I was stupid for asking! This resulted in him breaking his state and he was able to carry on with the lesson in a productive manner. Admittedly this doesn’t always work on the first occasion and it can be necessary to spend a little more time, using the same techniques with the individual. This also works well when faced with the ‘I can’t do this’ statement.

“Throughout the research my aim was for the children to become more aware of expectations, in relation to behaviour, at specific points in the nursery session.”

There are many other skills that I learned that I frequently put into practice, for example the use of well formed outcomes. This allows pupils to set clear goals for themselves and creates a route to help achieve these goals, which in turn increases individual motivation to succeed. Other skills include the use of embedded commands, which makes the presumption that the command will be carried out, achieving desired results. For example ‘could you do this?’ implies that they can and therefore will, and when used with a change in tonality makes this sub-consciously more of a command rather than a question.

Tag questions are also a useful tool that promotes thinking in a desired way. An example of how I use them in my class is to use the Milton model to suggest that the pupils are interested in what we are going to be learning and then add a tag question to this e.g. ‘I know you are wondering what we will be learning today, aren’t you?’; and when explaining why we are learning something specific, I would say something along the lines of ‘we are learning this because it’s good to... isn’t it?’.

As a result of this sort of training I now feel that I understand the children I teach on a whole new level, and can engage them at their level more effectively.

### Case Study 3 – Improving Behaviour

Rachael Coull teaches at Northburn Primary School.

#### Focus

Northburn Primary caters for pupils between the ages of 3 and 11 years. My specific project focus was on the use of anchoring, and the impact this has on behaviour. Throughout the research my aim was for the children to become more aware of expectations in relation to behaviour, at specific points in the nursery session. I was interested to see if the children’s behaviour improved, thus helping them to better access the curriculum.

#### Areas of NLP evaluated in the action research project

- Anchoring

#### Research Plan

After the first two days of the NLP course, it became apparent that I had already tried out some of the techniques used in NLP on previous courses, such as the use of music. However, it occurred to me that I had never delved deeper into the reasons why I was using these techniques and because of this I didn’t ever have a real purpose in mind, let alone an expected outcome. The needs within my own class led to the focus on anchoring with a view to having a positive impact on behaviour at what were more challenging parts of the daily routine.

I intended to influence others in my school mainly through modelling practice. As I began the course and my research, I aimed to share any new learning with the colleagues in my classroom and ask them to observe my practice with a view to encouraging them also to take strategies on board. As a result of this, team discussions took place in which we evaluated practice.

#### Implementing the Research Plan

During my morning nursery class, since the January intake, the behaviour of some children had become increasingly challenging especially at times where it was necessary to gain whole class attention and calm in order to carry out a routine task such as home-time or tidy-up time. I had been previously introduced to the use of music in my teaching through Thinking for Learning and Accelerated Learning courses but had never really associated it with the concept of anchoring, let alone begin to think about why I was doing it beyond ‘well, it helps some children to focus and make links!’ As I attended the NLP course, the techniques and reasons for using anchoring became apparent and I felt that they could work within my class by simply extending my everyday practice.

Firstly I pinpointed two particular times where the class were not as calm or organised as I would have liked. I already use a countdown technique in order to get whole class attention whilst they are in the middle of play; although this worked for the majority, there were still some children who consistently did not follow this routine and would carry on playing or chatting, making it a more lengthy process



than it needed to be. The other main time was home-time which had become a pretty stressful occasion – trying to give out pictures, asking the children to remain seated and calling out their names to dismiss them. I decided to carry on using my countdown technique as this was already partly successful, so I set about designating a specific spot to stand in when I wanted to gain the class's attention. I chose one spot inside and another outside (which became the 'tidy-up time spot'). The more I used this technique the quicker the children became at reacting, and the less I had to say.

After a couple of weeks of using the spot outside I would put my hand in the air, say '5' and the children began to run to where I was standing and sit down on the floor, ready for their tidy-up task. As this anchor became embedded, I watched other staff use the same technique but in random positions and saw it to be less successful, with some children taking a long time to respond and some not even coming to the spot. As I made my intentions explicit to the other staff, they began to take on this concept and also saw the benefits, also introducing their own ideas.

One day, because the children had spilt water on the area we usually stop at, I stood a couple of metres away and used the same technique. The children still responded quickly, however instead of coming to sit in a group, they all came and sat in a perfect circle. I later discovered that the previous day, the TA in my class had gathered the children in that spot to play some ring games. They had in fact created their own anchor – an anchor that we continued to use successfully for that purpose.

As for home-time I decided to anchor the experience with music – initially making my intentions clear to the children, telling them what behaviour I would see and why, before turning the music on. This process was a little bit more gradual and I never fully established the 'ideal golden silence'; however this time proved to be a lot calmer than previously. The children were able to receive their pictures more quickly, and hear their names being called more easily; the parents were visibly impressed – commenting on the calm and peacefulness as they entered nursery at home-time, and the staff felt less stressed.

As these anchors became embedded, others followed, including the 'rant and rave chair!' – a stool which I only sat on when I was 'feeling a little bit cross!' and needed to talk to the class as a whole. I was unsure whether this particular anchor would have as much effect as the others because only on rare occasions do the class need to be addressed as a whole in relation to behaviour. However, after only using this technique a couple of times in a four-week period all I have to do now is sit on the stool in front of the children, their faces drop and there is silence as one child asks 'Are you feeling a bit sad?'

A further anchor that came about throughout this project, as a team effort, was to help deal with children in conflict situations as and when they happened. The anchor came in the form of three chairs that are placed in a triangle formation. The two children sit facing each other and the third chair is for a member of staff to mediate between the two. Again, this technique quickly became embedded, with some children at times going to get their own chair when they had realised they had done something wrong! The main benefit of this technique is that the children appear to calm down more quickly after an incident and through structured questioning and discussion, are able to resolve conflict. I found that children were increasingly able to own up to what happened and seek a resolution acceptable to them, meaning they did not quite as readily go and do the same thing again.

#### Summary of impact

Throughout the project there has been a great positive impact on the staff and children. Routine tasks throughout the session are carried out in a more focused manner and the children's behaviour at these times has improved. Along with this, staff are able to deal with situations in a calmer manner and are more explicit about the reasons for doing things which has made us as a team more focused on what we want to achieve and how. As a result of this project I feel that I have developed my awareness of the positive impact of NLP. Consequently it has influenced the way I speak and react to children and other adults. I will continue to adapt my teaching style to reflect the use of NLP strategies in everyday practice and also influence the staff on my team to do so too.

*“I was aware that just lowering my voice at the end of a command had a powerful effect on pupils from trying this out with other classes...”*

## Case Study 4 – Influencing Behaviour

**Michell Whall** teaches at Astley Community High School.

### Focus

Astley Community High is a 13–18 school, in a semi-rural area of Northumberland.

My focus was to use Neuro-linguistic programming techniques with an aim to improve pupils' learning experiences and their engagement within lessons. The expectation was that application of particular NLP techniques would result in improved pupil behaviour in class leading to increased engagement within lessons.

### Areas of NLP evaluated in the action research project

- Anchoring
- Non-verbal communication

### Research Plan

The overall aim has been to develop my professional practice using suitable techniques such as NLP. Shortly after the first NLP training session I noticed that there appeared to be pupils within a particular class whom other pupils modelled their behaviours upon. These pupils seemed to have quite an influence over the behaviour and mood of the rest of the class who appeared to be taking quite overt behavioural cues from these pupils. Often these behaviours were low-level distractions such as giggling, pen tapping, whispering and chair rocking; however, on occasion these influencing pupils would seem to take cues from me and would 'shush' their fellow pupils or discourage them from other distracting behaviours.

To give some context, this was a Year 9 food technology class of 30 pupils whom I saw once a fortnight last lesson on a Friday; since I saw them so infrequently my rapport with this class was not as strong as with other classes. A considerable amount of time was devoted to classroom management and I seemed to spend a lot of the lesson repeating instructions over and over, giving out demerits (as per assertive discipline policy) and consequently making a lack of progress through the curriculum.

I thought it would be of benefit to the class, and my practice, to harness the influence certain pupils had in a positive manner using NLP techniques, hoping that these pupils would positively influence the rest of the class. I also wondered whether the behaviour of some of the influencing pupils might improve since these pupils were the ones with frequent demerits.

### Implementing the Plan

#### Lesson 1

I identified four pupils who appeared to have an influence over the behaviour of their peers and arranged the class into four groups (the room has four static clusters of work spaces), each with an influencing pupil. These influencing pupils were placed in a position in which they had a clear view of me at all times (something which the static seating in the food room precludes for the majority of the pupils, possibly contributing to the low-level disturbances in this class). The pupils identified as having influence were not told this, nor were the rest of the class.

The first thing I experimented with was the tonality of my voice, which I have always thought to be a little high pitched. I ensured that when I gave commands I lowered the tone of my voice at the end and paired it with a downward sweep of my hand. This was done whilst making clear eye contact with the four influencing pupils and in full view of them.

I was aware that just lowering my voice at the end of a command had a powerful effect on pupils from trying this out with other classes but this class in a previous lesson had been a little resistant and still chatted etc despite my using this technique. I thought that both use of lowered tonality and the downward hand sweep would lead to a quietening down of the class and an adherence to my requests, but my problem was that the seating stopped most of the class from seeing the hand action. I thought if the influencing pupils saw this they would generate a change in the other pupils' behaviour. The desired effect was almost immediate with the influencing pupils nudging the other pupils or instructing them about what I wanted them to do.

As the lesson progressed I noticed that rather than just following the cues of the influencing pupils the other members of the class were



“The lesson progressed well and the pupils attained all the learning objectives set (unheard of for this class) since I did not have to repeat myself over and over.”

beginning to pay far more attention to me than they had done, almost as if to try and see what information the other pupils were getting that they weren't. The lesson progressed well and the pupils attained all the learning objectives set (unheard of for this class) since I did not have to repeat myself over and over. I gave out far more merits than in previous lessons. But, most striking was that one of the influencing pupils was a child whom I would often have had to reprimand time and again, often leading to him being fed up, me frazzled, and a rash of demerits: this lesson he remained on task throughout and gained merits.

### Lesson 2

Seating remained as before and I continued with the use of tonality and the downward hand movement. This lesson I decided to introduce other visual and spatial anchoring to the class. Again, use of any technique that has to be seen is problematic in the food room, so once more I intended to make use of the influencing pupils to disseminate to their peers. The visual and spatial anchors I introduced were always in clear view of the influencing pupils.

*Anchor 1:* Standing to the left of my desk with my right hand on it – meaning quieten down the lesson is about to begin. *Anchor 2:* Standing at the back of the class facing the whiteboard – meaning prepare to carry out a task.

*Anchor 3:* In the centre of the room right arm raised – meaning to stop talking following a pupil discussion led task. I carried out these anchors many times during the lesson, along with the corresponding verbal command and always ensuring I made clear eye contact with the influencing pupils. As I expected, these pupils watched me carefully and ensured their peers were aware of my expectations. By the end of the lesson I only had to walk to one of these three places and the pupils became quiet in seconds. Once more I noticed that the pupils all became far more attentive to both my verbal and non-verbal communication and the lesson was as successful as the one prior to it. The pupils seemed to be calmer and happier and I wonder if this was a reflection of my demeanour too.

### Lesson 3

A practical food lesson, with myself being the only member of staff with 30 pupils is

often a recipe for slight chaos and raised voices. In the past I found shouting the only means to get the class's attention and then after a while this loses its effect. Often during a practical lesson it is important to get the pupils' attention very quickly, whilst they are often not listening to me, or are not within my line of vision. I wondered how well tonality, anchoring and use of influencing pupils would work in a practical situation. Initially, I found I had to raise my voice slightly because the all pupils were so engrossed in their work and communicating with their peers. However, the influencing pupils and several others became very quickly cued in on my body position and where I was stood in the room, and responded by becoming quiet and listening to instruction.

During the practical lesson the anchor I found most pupils responded to best was my raised arm in the centre of the room. For a practical last thing on a Friday the whole experience was relatively calm, and compared with previous practicals for this class it was something of a revelation. We were tidied up on time and the pupils produced excellent products. I would like to have continued with this class but this was the last time I saw them prior to the summer holidays. However, in three lessons, using quite simple NLP techniques and making use of the influence some pupils have on others, clear benefits were evident.

### Summary of impact

The impact of utilisation of my new learning has resulted in:

- increased engagement with the class
- a more attentive class
- the reduction of low-level unwanted behaviours
- a reduction in demerits issued
- more suitable progression through learning materials
- a better quality relationship between teacher and pupils.

My classroom practice has changed considerably since the NLP techniques are easily applied and become natural behaviour very quickly. The impacts were quick, and plain to see.

“We produced an NLP lesson assessment sheet where we could record information about the student's focus and concentration, work rate, communication with both staff and pupils and her tendency to distract others.”

### Case Study 5 – It's Good to Talk

Joanna Dobson and Helen Fuhr teach at St Benet Biscop High School.

#### Focus

The main aims of this project were to improve pupil behaviour and achievement by using specific NLP language and communication strategies and to give pupils strategies for voicing their ideas and building confidence in their own ability, allowing them to take more responsibility for their own learning.

#### Areas of NLP evaluated in the action research project

- Milton model language
- Meta model questioning
- Anchoring
- Rapport
- Visualisations
- Relationship rewards (management of behaviour and learning through positive reward and the maintenance of positive relationships)

#### Research Plan

The focus was to:

- gain a broader understanding of NLP and its use in the classroom
- develop skills in using NLP techniques and make them a part of our everyday teaching
- share our learning, understanding and experience of NLP with other staff through CPD sessions.
- combine our learning of NLP strategies with strategies employed through the Raising Achievement and IQEA groups to further enhance the learning and social and emotional experience of students within our classrooms.

Assessment of the success of the strategy is based on both subjective assessments of students' behaviour and achievements, and objective tests in either results gained in mock

GCSE tests prior to their June examinations or levels achieved in coursework and project work. However, a longer-term aim will be to assess the improvements in behaviour and attainment of all students in classes where NLP strategies have been implemented. The project is also designed to improve attitude and motivation for pupils in relation to their own personal learning, research skills and standard of homework.

#### Implementing the Research Plan

As this was a joint project we decided to choose a student we both teach and have experienced problems with. We chose the focus student because she was already on report and was seen to be having difficulties in other subject areas. We produced an NLP lesson assessment sheet where we could record information about the student's focus and concentration, work rate, communication with both staff and pupils and her tendency to distract others. We also gave the student an overall mark for her compliancy in lessons (4 being fully compliant and 1 being refusal to follow directions).

We decided to introduce more positive phrases into our classrooms. We focused on the use of the use of language in lessons. Commonly used phrases such as 'Why?' questions were changed to more positive phrases such as:

*'Can you explain how you came to that conclusion?'*

*'What is it that you don't understand?'*

Positive reinforcement was used regularly to elicit more thoughtful responses from students, for example:

*'I like that answer, can you tell me more about your thoughts on this?'*

*'You have made an excellent start on this task, what do you think you could do to improve this piece of work?'*

To be able to make the research more valid we decided to monitor four other students in the same classroom using the same assessment criteria. We both have observed positive effects in a number of other students and examples have been included below.

“ I have found that the use of NLP strategies has become an inherent part of my teaching...”

**Summary of impact**

Learning and understanding more about NLP have had an impact in many ways. We are more aware of the words we are using in lessons and have used NLP techniques to help develop a deeper understanding of students, and the concerns they may have about their work. We feel students are more comfortable to participate in lessons and, as classroom teachers, we are able to help students find ways to help themselves. The impact of NLP strategies has been far more wide-reaching than we had anticipated. A Year 10 class focused on initially was a foundation science group with abilities ranging from C to F grades. Confidence and motivation were key areas to target throughout the student group. Our focus student has met all the objectives set out in the project. Her work rate and concentration have been consistently excellent and the level of work she has produced both in lessons and at home has been of a consistently high standard. She has contributed well in lessons and has maintained her focus during tasks.

The effect on three of the additional four students studied in this class has been even more dramatic.

**Student 1 profile:** Very quiet, lacking in confidence, slow work rate

Student 1 is an extremely quiet student with very little confidence in his own ability. He very rarely contributed voluntarily to class discussions or offered answers to questions without prompting. With regular encouragement and use of NLP language he has shown a great improvement in his contributions in class, which also demonstrated a significant level of understanding. With more difficult topics he was encouraged to explain his ideas to the class and was able to confidently describe a biological principle to the whole class using a diagram on the board and the correct scientific language.

**Student 2 profile:** Quiet, poor concentration levels, poor work rate in class

Student 2 is a quiet student with poor concentration levels. He very rarely contributed voluntarily to class discussions or offered answers to questions without prompting.

With regular encouragement and use of NLP language his contributions in class have improved and he has also demonstrated a significant level of understanding. During a recent class debate on ‘Human Impact on the Environment,’ he showed a remarkable level of understanding of the topics discussed and was able to give a sound reasoned argument for his opinions. He was focused and on task throughout the lesson. He became increasingly animated during the discussion and delivered his opinions confidently and enthusiastically. He obviously enjoyed the lesson and left the class smiling and still offering his opinions and ideas.

**Student 3 profile:** Poor concentration levels, easily distracted, poor work rate in class

Student 3 appears to be a confident student in everything but his academic ability. He can be disruptive and cheeky and is easily distracted by his peers. He finds working to deadlines difficult and rarely completes timed tasks in lessons. Homework is also an issue and is rarely completed. I felt that Student 3 lacked confidence in his own ability and was frightened of failure. He did not expect to do well and so underperformed regularly. Using NLP strategies with lots of positive reinforcement and praise appears to have had a marked effect on his performance and behaviour.

Over the weeks of the project, he became more focused in lessons and was encouraged to participate at every opportunity, offering his own ideas and opinions. At first, he found this difficult and gave the usual response of shrugging his shoulders and muttering ‘Don’t know’. Gradually, he grew in confidence and started to contribute more in lessons and complete written tasks. The breakthrough came after he completed a mock Biology GCSE paper for me. He achieved a C grade having been predicted an E. I took the opportunity to reinforce the positive messages used throughout the project and he was obviously delighted with his performance. Since then, he has continued to contribute well to the class and has produced two homework tasks on time.

I have found that the use of NLP strategies has become an inherent part of my teaching and I have seen improvements in students in other classes where I have used specific language

“ The first signs that the strategy may have been having an effect were seen in homework completed and handed in on time.”

or strategies to solve problems. I have therefore extended the project to include some examples of the effects observed in students from other classes and year groups. The following two examples are from Year 9.

**Student 4 profile:** A very likeable student who tries very hard in lessons but has a severe confidence problem and is afraid to tackle anything new. Extremely concerned about tests and exams and loses all concentration if faced with a test.

Student 4 is a low ability student but puts great effort into his work and wants to do well. He is severely hampered by his lack of confidence and was beginning to allow this to stop his enjoyment of lessons. Using NLP strategies with lots of positive reinforcement and praise appears to have had a marked effect on his performance and confidence. In a recent lesson, we were drawing graphs and interpreting data. He drew the graphs, then pushed the paper aside and said he couldn’t do the work.

He still finds test situations extremely stressful but NLP techniques help to calm him down significantly. I decided to use an NLP Anchoring and Visualisation technique to help overcome his fear in exams and improve his confidence. Before every assessment and particularly before his mock SATs test, I have used a whole class relaxation technique to allow the students to calm down and focus, asking them to visualise themselves completing the test successfully and seeing the grade they want to achieve written on the front of the paper. This has not only helped this student to remain calm during test situations but has also created a relaxed, calm environment that has helped the other pupils in the class to focus on their work. Student 4 is now aware of how he reacts to test situations and knows he needs to deal with this problem. He is gradually learning how to cope and use strategies to help himself calm down. Interestingly, the rest of the class obviously benefit from this technique too and now ask for the relaxation technique to be used before they do any end-of-topic test.

**Student 5 profile:** A very capable student with a huge lack of confidence in his own

ability. Capable of disrupting lessons with silly behaviour, he lacks concentration and focus. Homework is rarely completed.

Student 5 is a very able student working in a Triple Award Science class with and alongside many gifted and talented students. He has decided that he does not fit into this very able group and has convinced himself he is going to fail. I have worked on positive reinforcement together with peer teaching to encourage him and help him to regain his confidence.

The first signs that the strategy may have been having an effect were seen in homework completed and handed in on time. This is a major improvement for this student, who had struggled to complete any homework from September. An eight-week project was given to the class in April and the work he handed in was excellent, showing a very good level of research and understanding. I have also used peer teaching with this student. He is an extremely good mathematician and will complete any tasks involving scientific equations very quickly. I have then used him to peer teach other pupils and he has obviously enjoyed this role and gained confidence from it.

Another student who was not the main focus of the study was also helped by my knowledge of NLP. Whilst doing a revision class this student appeared to be very upset and was crying. This student had been finding coursework in HSC extremely difficult and had a tendency to over-complicate tasks. After the class I kept her behind and used NLP strategies to help understand what was upsetting her. Instead of asking her why she was crying I asked her what was making her so upset. She said she didn’t understand what to do; I then proceeded to continue asking NLP Meta model questions to get to the bottom of the problem. Through using this technique it turned out the student was having difficulty understanding because she couldn’t hear properly; she was deaf as a child and had had an operation to improve her hearing. She can hear but not fully, and said she struggles in most subjects, especially English. In primary school the student had a SEN teacher but the teacher had thought her hearing problem was over-exaggerated by the student so had not informed anyone of the problem.



Since the conversation I have spoken to our Special Educational Needs Co-ordinator (SENCO) who is going to do an assessment of the student concerned. The student arrived for her lesson the day after our chat and appeared to be a different person, as if a weight had been lifted from her shoulders! I am awaiting the results of the assessment.

Throughout the project, we have shared our experiences of NLP, and we have both realised how useful and successful these techniques have been with a wide variety of different issues facing students. We have constantly improved and changed our techniques and strategies based on our own and each other's experience. NLP has made us more conscious of the words we use when talking to students and we both feel confident enough to be able to guide students into reaching their own conclusions when dealing with various issues. The use of positive reinforcement and positive, encouraging language has been extremely successful with many students.

Building rapport with students is very important and being aware that each individual interprets and sees things completely differently has made us keen to research NLP further. Through our discussions we have observed that NLP enables students to engage and contribute usefully to lessons. Students have been able to explain themselves more clearly and are able to problem solve and bring themselves to suitable and workable solutions through guidance and communication with the teacher. There has been a significant improvement in the levels of confidence shown by pupils in the classroom; this has led to increased motivation which has manifested itself both in improved contribution and work rate in class and improved quality of homework.

We have also shared our experience with our mentor and with an AST at school who are both planning to incorporate our ideas into their own teaching. In addition, we are planning teaching sessions in September to extend these ideas to the wider school community – in this way we may be able to target specific pupils across the curriculum and gain a deeper understanding of the effects of NLP strategies used in a wider context.

## Case Study 6 – Language Patterns at Work

**Nina Blanchet** teaches at Sele First School.

### Focus

Sele is a First School near Hexham, Northumberland. I focused on the use of language and on developing my own confidence when speaking in a large group (e.g. staff meetings).

### Areas of NLP evaluated in the action research project

- Milton model language

### Research Plan

At the beginning of the course, I was unsure what I was going to focus on. Having the days split up on the training helped me as I was able to go back into the classroom and try some of the new language patterns out with the children. I was amazed about the impact that changing the way I phrased something had on the children. I then decided to work with a small group of children that I had to speak to regularly about their behaviour.

### Implementing the Research Plan

During the Leading Thinking course I began to think about the different situations in which I could change my language to have a positive impact on the children. In the beginning I experimented with some of the different language patterns and I was amazed at the impact they had. The children were immediately interested in what I had to say. My initial plan was to work with the children whom I had to regularly talk about their behaviour. As I started to change my language I had a good response. I started to notice that by turning my language into a positive the children wanted to show me how they could tidy up straight away, that they could walk around the nursery, that they could share the trains etc.

In one case I spoke to a child who was continuously not sharing and being unkind to other children. I planned to try and talk about how she could help to make nursery a happy place for everyone. I changed my language to ask her things like:

“I was very proud of how I delivered it with much more confidence than in the past.”

*‘What could you do to make the nursery a happy place?’*

*‘I wonder if you could show me how to help...’*

By changing my language I was giving her the ownership of the situation. I saw a dramatic improvement in her behaviour and an eagerness to show me that she could share and be helpful to others. I have particularly enjoyed using the ‘Teaching Influence’ cards and have been amazed at the impact they have had. It has taken me some time to practise some of the phrases, although I now have some key favourites that I enjoy using.

### Summary of impact

I have learnt and continue to learn about how language has an impact in all situations. When I took a staff meeting with my colleague I was very proud of how I delivered it, with much more confidence than in the past. When I was taking the meeting, I realised that I had actually learnt a lot of new information! I was able to give examples of what I had done in the classroom, which my colleagues enjoyed and were able to relate to. In my general teaching I feel that I am much more aware of the way I use language, and know how to maintain a positive state.

## Case Study 7 – Middle School – Language

**Emma Volpe** is a Modern Foreign Languages teacher at Allendale Middle School, Northumberland.

### Areas of NLP evaluated in the action research project

- Milton model language
- Well formed outcomes (visualisation of goals)

### Focus

After discussion with colleagues and the course leader I decided to focus my project on using positive language and framing with a Year 8 French class. This is a mixed ability class with students ranging from Level 2 to Level 5. There are 13 girls and 15 boys, with two pupils with a statement (ASD). There is a good relationship

in the class amongst the students. I chose this class because I was about to teach a difficult topic (*passé composé*) including complex grammar, which can demotivate the less able.

### Research Plan

I wanted to see if, using NLP techniques, I might be able to create a more positive learning environment which would help students approach challenges with vigour, resulting in a higher level of achievement and increased motivation.

### Implementing the Research Plan

I decided that my focus was going to be primarily one of language following the Milton model. I wanted to see if by changing my language I was able to create a more dynamic and positive learning environment. Being aware that the starter activity of a lesson is a key area to the success of the lesson as a whole, I focused on using language to frame the lesson positively.

For example:

- ‘I know that you have been eager to talk about things that have happened in the past...’
- ‘You may already have noticed...’
- ‘I know that you are curious about/ have been wanting to use...’ etc.

This particular topic is all about recognising patterns making links etc. and the success of the learning depends very much on helping the students ‘notice what they notice’. I experimented with the Teaching Influence Cards resource throughout the course of the topic. Although I had initially thought that I would concentrate on one particular class, once I began to question my own language techniques it was almost impossible not to employ the patterns with others. I also focused on a particular boy who had begun to lose confidence of late in the subject. I spent some time with him setting SMART short term goals (with all modality representations: visual, auditory, kinaesthetic) from the Well formed outcome, employing NLP techniques, again using positive language. I kept track of this particular student's positive state/participation over three weeks by using a scale of 1–4, with 1 as positive and 4 as negative.



“A conscious effort was made to make less use of the word ‘don’t’ and to instruct the children to do things by means of an ‘embedded command’ (a form of suggestive language pattern).”

### Summary of impact

There is no doubt that over the course of a few weeks a more positive learning environment was created as a result of the project. The class were less fragmented in their focus and responded well to the language patterns I employed. They responded to the challenges with enthusiasm and I received positive verbal feedback from the students. They were proud of their achievements and more engaged with the subject. It was particularly pleasing to hear this from male pupils as raising standards and improving motivation amongst boys was one of the key areas of focus for French within the school. The language used stimulated curiosity and made the learning experience more inclusive. The one student that I particularly focused upon responded beyond expectation, gaining 10/10 in a vocabulary test (the target had been 8). The pleasure gained from his success fuelled his motivation and his participation in whole class discussion increased enormously.

Using NLP techniques has made me more aware of the importance of my ‘state’ and how this impacts on the delivery and success of the lesson. The project has made me reflect upon the effectiveness of my communication in both in my professional and my personal life. I am taking note of the language patterns I am using and trying to introduce language patterns from the Milton model. Verbal feedback from students helped me to evaluate the project.

Sharing my learning with others helped me to consolidate and build on the knowledge gained from NLP techniques. Having to articulate and summarise what I have learned has led to a more comprehensive understanding and has provided an opportunity for further reflection and discussion. The chance to discuss findings and ideas with colleagues from different types of schools was stimulating and helped me gain a broader knowledge. It also made me challenge preconceptions about the way we assume children learn, both in our individual particular type of learning environment (i.e. type of school, age, range etc.) and in general.

### Case Study 8 – More Positive

**Stephanie Kidd** teaches at Coulson Park First School.

#### Focus

Coulson Park First School is an average-sized school serving an area of social and economic deprivation. My main aim for my own professional learning was to find out more about NLP and how it could enhance the running and the atmosphere of my classroom. I was keen to see how the use of NLP would impact on my classroom. As I was new to the ideas in NLP I had no solid expectations as to how attitudes or behaviour would be impacted.

#### Areas of NLP evaluated in the action research project

- Anchoring
- Milton model language

#### Research Plan

The focus for learning and research was identified through discussion with the course leader. I then spent time in the classroom observing the children and listening to myself talk to the children. I also asked my classroom assistant to help me to identify areas where I could rephrase what I was saying.

#### Implementing the Plan

It was planned that more positive talk would be incorporated into the classroom along with the use of embedded commands. In addition to this I decided to use music as an anchor and non-verbal command. A conscious effort was made to make less use of the word ‘don’t’ and to instruct the children to do things by means of an ‘embedded command’ (a form of suggestive language pattern). When I first started doing this I was actually uncertain as to why I was doing it, and I picked them as I thought they would be the ones I would be able to influence most effectively. I was unsure as to what kind of effect I wanted or expected to have on the children.

After beginning the implementation process and liaising with colleagues I remained uncertain about changing the way I speak

“The use of music as a command was an area that interested me as I frequently use music in my classroom.”

in the classroom, and I found that using ‘embedded commands’ was especially difficult. However, the more I discussed my findings, and after a further two days’ training (during which I became more familiar with NLP through sharing experiences), I realised that the changes I had made had been more effective than I had first thought. With this in mind I persevered and have had some pleasing results.

### Summary of impact

It has always been my opinion, and that of colleagues, that positive language is used to good effect in my classroom. This remains my opinion although it is now my belief that it is used to greater effect. After listening to myself and asking my teaching assistant to listen to me I learned that there were many more opportunities for positive talk than those I previously took advantage of. I did however find it incredibly difficult to change the way I addressed the children and spoke to them as a class. As of yet I have not noticed a difference in the way the children behave as a consequence of these changes in speech. I have however noticed a difference in the way I feel when I have made a conscious effort to be more positive and I feel that this in turn is sure to have a positive effect on the children in my care.

The use of music as a command was an area that interested me as I frequently use music in my classroom. The children in my class are used to hearing music in the class and they liked the idea of ‘tidying up’ to a particular track, which we voted on. The children responded very well to this and they enjoyed the challenge of being finished and sitting smartly by the time the song had finished. There were occasions however when I would forget about the music and simply ask the children to tidy up and they were quick to tell me that I wasn’t meant to ask them! I will continue to use music as a command as the children reacted well to the idea and it helped to promote their independence.

During the process, and as I started to become more familiar with the different aspects of NLP, I found myself applying some of these different aspects, sometimes almost subconsciously, and at other times when a situation arose that

I thought would lend itself particularly well to an example we had discussed as part of the course. I began to make particular use of the Teaching Influence Cards and I found that the use of one in particular had a remarkable and pleasing effect.

There is one boy in my class who has a high ability across all fields; however, despite his intelligence he responds badly when he gets a question wrong or finds something difficult, and becomes very upset. Usually I encourage him to have another try but it can take a substantial amount of time until he is willing to do so.

The child in question recently volunteered an answer that was incorrect and he quickly became upset. Instead of asking him to try again I rephrased my speech and engaged his curiosity by saying ‘I wonder what would happen if you just read that question again’. The child’s head came up, he read the question again and volunteered another answer, still incorrect. I used a similar phrase ‘I wonder if you would get a different answer if you read it just one more time’. He read it again, volunteered a different answer and got it right. The whole process took a matter of minutes and the child’s self-esteem was left intact. I also began to make use of presuppositions that suggested the children would achieve and that seemed to instil a greater level of confidence in a number of the children.

Although there have been no major differences to the way my classroom runs, there have been small yet significant changes. Children seem to be more willing to try if I invoke their curiosity and embed in them the belief that they can achieve – and already have achieved. As I continue on the learning curve that is NLP and as implementation becomes more natural, I feel there will be more of these changes.

I learned that as I became more familiar with the Leading Thinking programme I found it easier to deliver in the classroom, and that what I was doing was of value. In the future I look forward to sharing my knowledge and experiences with others in my school.

“After the completion of the additional NLP practitioner course, two members of staff will be able to lead and coach more colleagues within school.”

### Case Study 9 – Motivation and Facilitating Access

Mark Phillips teaches at Tweedmouth Community Middle School.

#### Focus

Tweedmouth Community Middle School is in Berwick, Northumberland. The main reason for attending the course was to build and develop pupils' motivation and attitude to school and the curriculum. I have also recognised that the training can be used as a tool to manage behaviour. Counselling and pupil welfare will also benefit from the skills developed. My focus was on tackling objectives identified in a departmental and whole school action plan. It also addressed aspects of my own professional development that I would like to build on. The 'Leading Thinking' NLP training enabled me to develop the role of submodalities in building and strengthening learning styles, and in pupil welfare.

#### Areas of NLP evaluated in the action research project

- Anchoring
- Meta model questioning
- Submodalities
- Visualisation
- Well formed outcomes

#### Research Plan

Initially my plan involved attending the 'Leading Thinking' programme. The use of the course tutor as an individual coach, and peer attendance (one of my colleagues was also on the course) facilitated regular reviews of the implementation of, and reflection on, my newly developing NLP skills and techniques. My plan was also to extend the work to accommodate other colleagues (regardless of role in school, office staff etc), and the whole school.

#### Implementing the Research Plan

I have found that my knowledge base about psychology, and my understanding of children and the way that they process, relay, interpret, learn and communicate has grown hugely as a result of being involved in this programme.

I feel that I now can understand the children I teach on a whole new level, and engage them at their own level more effectively. I have also changed some aspects of the way I approach my teaching, and how I deal with specific children. Some of the skills developed in the course that I have used in my practice are:

- well formed outcomes (pupils setting goals and pathways to achieving them, developing motivational attitudes)
- powerful questions (the use of tonality and well thought out language to develop an expected response)
- influential teaching (use of body language, embedded commands, 'yes' sets, tonality and specific vocabulary to achieve desired results)
- visualising (use of memory for activities as well as making sense of experiences)
- designer states (giving children the ability and skills to change their emotional state to a desired one repeatedly)
- anchoring (use of space and continuity of instructions in the classroom).

#### Summary of impact

I have found that I have a lot more confidence in myself as a successful classroom practitioner. I have noticed a lot more responses from children who have struggled to address the curriculum, and children with motivation issues. Some children have also accessed some of the NLP skills to develop personally. The usage in school is beginning to grow as we develop our practice, and engage in reflective discussions.

I have also found that some children find it difficult to access visualising techniques, but support from my coach has helped me make this accessible to more children.

After the completion of the additional NLP practitioner course, two members of staff will be able to lead and coach more colleagues within school. Up to this point in time all the learning that has taken place has been really successful, and I know it will continue to be so as my practice develops, and we work towards a whole school approach to the use of NLP.

“For me, 'noticing what I noticed' felt like I had been given a fresh pair of eyes, suddenly I was aware that people were telling me a lot more than I had previously thought...”

### Case Study 10 – Noticing and Coaching

Gillian Hogg teaches at Duchess's Community High School.

#### Focus

Duchess's Community High School has over 1200 young people, and is in Alnwick, Northumberland. I hoped to learn how to integrate Neuro-linguistic programming principles and strategies – particularly positive language patterns – into my everyday work and so to become more effective in my interactions with staff (especially those I have a responsibility for) and students alike. My aim is to become a model practitioner of NLP techniques and to be able to disseminate good practice throughout the school.

As it is suggested that a person's attitudes and self-belief are closely linked to their motivation and consequently their overall achievement, I hoped that being able to improve my interactions with them would allow me to enable them to achieve more in an way that is ecologically sound for both students and staff.

#### Areas of NLP evaluated in the action research project

- Eye accessing cues
- Milton model language
- Sensory acuity

#### Research Plan

The Assistant Headteacher (GM) initially made me aware of the Leading Thinking course as a CPD opportunity. During the course, and as a result of co-coaching sessions begun with my school colleague (DMF) during the training (which continued at school), I decided to refine both my teaching and coaching work using the strategies I had learned on the course, as the skills I was learning fitted in well with my previous coaching training and experience.

#### Implementing the Plan

I thoroughly enjoyed the first two days of the Leading Thinking course and I found the principles and strategies we learned struck a chord with me and how I would like to develop

my skills further. I decided that I would like to have further reading material to support my learning, and on the recommendation of my tutor, I also used *the NLP workbook* by Joseph O'Connor for further reference (O'Connor, 2001).

The first major impact of my learning was wholly unintentional, but as a result of a coaching session with DFM during day 2, for the first time I was able to see how I visualised my different roles and responsibilities within school and assess how comfortable I was with each part. This led to a weekend of soul-searching before I realised that my priority role was in fact my coaching work as I consider this to be my greatest strength, and I also found that I still felt that I had a lot to give to this role.

I discussed my learning at length with DFM during our training and also back at school. I found the break sessions of the course useful as we had an opportunity to discuss our experiences informally, but this too led to greater learning as we compared our progress within different contexts.

For me, 'noticing what I noticed' felt like I had been given a fresh pair of eyes: suddenly I was aware that people were telling me a lot more than I had previously thought, although I still have some way to go before I can pick up on this in an unconsciously skilled manner. I made regular notes of instances that seemed particularly significant, such as a colleague regularly using eye-accessing when discussing her former high school.

I initially wanted to complete a significant amount of experimentation with language patterns over the course of the final weeks of term, but this was quite difficult as many of my classes had either left or were on work experience. I intend to pick this up from day 1 of the new term, as I will be planning several fresh outlines of work which will provide me with an opportunity to consider and reflect on how I would normally (or previously!) have delivered the work, and then to begin to improve upon the most often used phrases/discussions in my mind.

By making a real effort to use positive language in my interactions with students, I



“This project has had a huge impact on my own work and personal attitudes...”

began to notice small, but not insignificant improvements in their responses and attitudes. With the A2 exams fast approaching, a number of Year 13 students were making regular visits to my classroom – even when I wasn't in – to get help with their revision from any chemist who happened to be wandering by. When talking to the students, I regularly used linked unrelated phrases (the fact that x means y), agreements and statements focused in positive terminology while we discussed the practice questions they had completed and where they still felt they had weaknesses.

I also found the use of 'yet' a gentle way to soften the many 'I can't...' and 'I'll never...' statements, and although a few picked me up on this, I simply explained the principle of what I was trying to achieve, and how they could also use this technique to give themselves a kinder version of self-talk. A couple of students expressed an interest in this and this led to further discussions, in part triggered by an incident a week earlier where we had been encouraging them to learn the characteristic colours of transition metal compounds.

In the past, I have always taught my students that they should try to remember the colours by recalling the test-tube experiments and then memorising the colours – over the years this has had varying degrees of success. Inspired by the work we had done using visualisations and submodalities, I suggested that if students always connected certain objects or words to a certain colour, they could possibly use that to help them learn the colours. One student said immediately 'yeah – triangles are always yellow.' I didn't think I had much of a tendency towards this, until I caught myself trying to finish his sentence in my head with 'blue'!

#### Summary of impact

Through the training I received on the course and the extra reading I undertook, I was able to continually refresh my working knowledge of the strategies and approaches I wished to learn. I found this helpful as I was able to reflect on recent experiences while reviewing a chapter or when picking out teaching influence cards for quick inspiration. A follow-up session with John Carey at school, between the two sections of the training, was helpful for sounding out my ideas for working with an

individual with EBD (Emotional and Behavioural Difficulties) support requirements and how to ensure I used process and not content.

This project has had a huge impact on my own work and personal attitudes, particularly the concept that whatever the behaviour of an individual, they have learned to be good at it, and also the benefit of using positive language structures, both in my own internal dialogue and with others. The impact on my students can only be recorded subjectively at this point, although data will become available during the Autumn term. My main observed impacts on students were that when I took the time to use language in a more considered and constructive way, the effect on students was at times almost instant, they visibly relaxed or they also began to change the language structures they were using, moving away from using defeatist statements.

I regularly shared my findings and observations with anyone who would listen, and some colleagues have expressed an interest in finding out more. I hope to have further positive impact on students next term and ultimately for other colleagues to recognise alternative effective ways to communicate with individuals and groups, although this stage it is still very much in its infancy.

### Case Study 11 – Positive Attitude

Nicola Hurst teaches at Northburn Primary School.

#### Focus

Northburn Primary caters for pupils between the ages of 3 and 11 years.

The focus of my professional learning was to develop my knowledge, skills and understanding of teaching and learning and assess the impact of the NLP I had learnt on these. As I am pre-threshold, this learning would contribute to developing my co-coaching, coaching and leadership skills. Through the implementation of what I learnt on the course I focused on achieving a more positive attitude to school from some pupils in my class, as well as improved behaviour and motivation as a whole.

“I had succeeded in getting their attention without having to say a word...”

#### Areas of NLP evaluated in the action research project

- Anchoring

#### Research Plan

I initially decided to focus mainly on one child (J), a Year 4 boy in my class who could be rather apathetic in his attitude towards school and learning. He also had tendencies to be negative about his own ability and would 'give up' at the first hurdle he encountered. J had friendship issues with his peers and could be rather oppositional towards others. I wanted to enable J to have a more positive attitude towards himself, his work and others. I then hoped that a consequence of this would be that there would be an improvement in J's behaviour both in and out of the classroom.

To aid J I decided to use the Teaching Influence Cards and alter my use of language patterns. My initial plan was to select three cards at random each morning and try and incorporate the language patterns into my delivery of lessons and how I spoke to J independently. I would begin the day fully focused on what I wanted to achieve by the end of it but somewhere along the line would be trying so hard to remember the phrases/ embedded commands on the cards and use them at appropriate times that the point of what I was trying to do would be lost. Following a discussion with my mentor and a colleague from my school also on the course I decided to alter my focus.

#### Implementing the Research Plan

The new focus became 'anchoring'. I decided to put the space available in my classroom to better use. My school has a signal that when an adult raises their arm above their head they want all pupils to follow suit and to stop talking. I have used this throughout my time at the school with varying degrees of success. Some pupils follow it to the letter whereas some raise their arm and continue chatting to their friends. My new anchor was to be that when I stood in a particular spot in my classroom it meant that I wanted everyone to stop what he or she was doing and to focus on me. I began to do this without explaining to the class what I was doing. The spot I chose was near the classroom door and at the opposite end of the

room to where the whiteboard is so that the pupils were not used to me standing there at all.

The first occasion I used the above was rather successful! I stood in the spot and didn't say anything as I observed the class. Some pupils sitting close to me realised I was nearby and slowly but surely they began to stop what they were doing and waited for me to speak. The rest of the class picked up on the atmosphere and halted their activities. Once every single child was paying full attention to me I gave further instructions but did not explain why I had moved to a different spot in the classroom. Once the class began work again there was a very calm atmosphere. I had succeeded in getting their attention without having to say a word – something that undoubtedly had a positive impact on the response I received from the class. I was also in a 'positive' emotional state as I had not been met with resistance about the arm signal, neither had I had to raise my voice.

I continued to use this anchor and after a few more times I overheard a pupil whisper 'Shhhh, Miss Hurst is standing in the corner.' The pupils had successfully linked my action to what I wanted from them. As time progressed, together as a class we got to the stage where sometimes I wouldn't even have to reach my spot on the opposite side of the classroom for everyone to put their full attention on me. The atmosphere was altogether calmer and made for a much more positive learning environment.

Alongside the anchoring of space in the classroom I tried out some other aspects of NLP anchoring but not in as much depth. I used music a few times at the end of the day when the pupils were in and out of the classroom to collect their belongings from the cloakroom and generally preparing for home time. Some could be quite boisterous as they returned to the classroom, which was not conducive to ending the school day peacefully. Year 3 pupils were participating in the Big Sing but all of Years 3 and 4 had learnt the songs. I decided to use songs from the Big Sing that they all knew as my class had particularly enjoyed learning them. I put the music on as the pupils went in stages to the cloakroom. Those left in the classroom would join in singing the songs but calmly so. The pupils returning were more settled and joined in with the singing.



“*Firstly, my awareness of the use of negative bias phrases in my teaching has been heightened.*”

A few pupils in my class ‘swing’ on their chairs and I would normally have said ‘Stop swinging on your chair/don’t swing on your chair.’ This of course is negative use of language so I adapted how I asked pupils to sit appropriately on their chairs into commands such as ‘Please place all four chair legs on the floor’ without addressing a particular child or halting my ‘teaching flow’. As time progressed I changed the spoken command into a signal where I raised four fingers on the same hand to my shoulder height. The few pupils who habitually swung on their chairs then checked that they were sitting appropriately and if not, adjusted their seating accordingly. This then meant the teaching and learning within the lesson could continue without undue interruptions.

#### Summary of impact

Firstly, my awareness of the use of negative bias phrases in my teaching has been heightened. I am looking towards becoming more confident in the use of the Teacher Influence Cards and using some of the language patterns more naturally. Spatial anchoring has exceeded my expectations regarding how well it has worked. My classroom is calmer and more settled, without the need to raise my voice to get pupils’ attention and I no longer get a half-hearted response when I want them to halt their activities.

I intend to continue further investigating the effects that music has at different times of the day and which type of music is best suited to what I want the pupils to achieve: for example what piece of music would let the pupils know it is ‘tidy up’ time, so that they would tidy up well and in a sensible manner.

Should the need arise I will continue to use positive language phrases when asking pupils to sit properly and if need be, use signals instead of spoken commands.

The spectrum of NLP is vast in an educational context and I intend to continue to incorporate NLP strategies into my everyday teaching and practice. The impact of the spatial anchoring on myself was that I found my classroom management was ‘smoother’ and I was in a more positive state when communicating with pupils. The classroom was more productive as over time there was less time spent waiting to get all pupils’ attention. Pupils’ behaviour and

motivation appeared to have greatly improved over the length of the project. My classroom management style has also developed which I hope to transfer into developing my leadership skills for the future.

### Case Study 12 – Ready to Learn

**Julie Newton** teaches at Corbridge First School.

#### Focus

Corbridge First School is a small (150 pupils) Church of England school situated in a village in Northumberland. My focus is to carry out a piece of action research as part of an NLP training course called ‘Leading Thinking’, designed to improve teaching and learning in schools, and also develop leadership skills/qualities. Reflecting on and evaluating my current classroom management skills and identifying areas where NLP techniques could be used influenced the focus for the action research: I decided on the ‘readiness for learning’ of pupils at the beginning of whole class teaching sessions.

#### Areas of NLP evaluated in the action research project

- Anchoring
- Storytelling and metaphor
- Visualisation

#### Research Plan

To be successful learners, children need to be in an appropriate emotional state to access the learning opportunities provided. After the first part of my NLP training I focused on my pupils’ readiness for learning, particularly at the beginning of whole class teaching sessions. I felt that as the year had progressed the children seemed to take longer to settle when coming to the carpet so, as a starting point for my research project, I decided to collect observational evidence to confirm my initial thoughts.

I asked my teaching assistant to help me do this over one week and then together we evaluated what we had seen. Before beginning the research, I had expected that any planned interventions would probably be focused upon

“*The two words ‘and’ and ‘but’ are perhaps the smallest – as it turns out, however, they are hugely influential.*”

two or three children. However in reality our observations showed that the unsettled state of the class could not always be put down to these pupils.

Children illustrated their ‘unreadiness’ for learning in several ways, for example, distracting others by inappropriate behaviour, being distracted by others, talking, fidgeting. It was also interesting to analyse my reactions to specific incidents and consider the type of impact (i.e. positive or negative) this may have had on a child’s emotional state. After discussing our findings and exploring several possible interventions, I decided to concentrate on the NLP technique of ‘anchoring’ whilst at the same time bearing in mind how I could use visualisations in my teaching.

#### Implementing the Research Plan

After considering different anchoring techniques that we had discussed during Part 1 of our training, I decided to use ‘carpet places’ but with an additional feature... ‘magic’! I told the children a story about a class just like themselves, who became the most fantastic class ever, embellishing the story with lots of colourful details and helping the children to visualise what it would be like to be in that class. Part of the story explained that the reason that this class was so amazing was that their teacher had been given some magic powder that once sprinkled on the carpet helped the children sit smartly, gave them extra thinking power and helped them to listen and learn. However the powder only worked if each child sat on his or her special ‘magic spot’. The children were enthralled by the story and when I asked them if they would like to pretend that they were the class from the story the reply was resoundingly positive! The next day I brought in some ‘magic powder’ and the children were mesmerised as I sprinkled it onto the carpet and then gave them each a ‘magic spot’ to sit on. Once on their spots I praised the children and told them how smartly they were sitting, how much extra thinking power they had and how ready they were to listen and learn.

The ‘magic spots’ have been a great aid to teaching and learning within the classroom. Children are much calmer, focused and receptive to learning at the start of whole class sessions and a quick wave of the magic wand is a great visual aid to remind the children of

what is expected of them. Also, if a child has had an incident at playtime that has been upsetting, going to sit on his/her magic spot seems to have a comforting effect. The system of seating is easily adapted, as if children need moving around this can easily be done by just getting hold of a bit more of that magic powder and giving the carpet a quick sprinkle!

#### Summary of impact

In a wider context the impact of attending the Leading Thinking course has been far reaching. Firstly, within my classroom it has provided me with many more ideas that I want to initiate over the coming months, for example, experimenting with different language patterns based on the ‘Teaching Influence Cards’.

Secondly, it has created a useful opportunity to work with my colleague who teaches Year 2 regarding our research projects and for me to work with my teaching assistant to carry out a piece of action research within our classroom.

Thirdly, it has enabled me to extend my knowledge and understanding of leadership, including how to use language to positively influence and motivate people and contribute to their wellbeing. And finally, it has helped me in both my professional and personal life by introducing me to useful strategies to experiment with when faced with situations that I find challenging.

### Case Study 13 – Small Change, Big Impact

**Laura Holland** teaches at Mowbray First School.

#### Areas of NLP evaluated in the action research project

- Milton model language

#### Focus

I was interested to discover what impact I could have by introducing some small changes in the way I spoke to my pupils and the language that I use. The two words ‘and’ and ‘but’ are perhaps the smallest – as it turns out, however, they are hugely influential.

“I wanted to achieve a calm and effective way of getting the children to tidy up rather than constantly repeating the phrase ‘tidy up’.”

#### Research Plan

The child, referred to as Child A throughout this assignment, is a five-year-old boy in my Year 1 class. I had begun to notice that Child A, who had been diagnosed as having Type 1 diabetes at the end of his Reception year, was lacking motivation towards his written work. As a result, the work that he was producing was of poor quality in comparison to other children of the same ability.

Through my first experience of NLP I became aware of how the use of my own language when responding to his work was impacting on his attitude towards his writing in independent tasks. He responded well to visual rewards such as stickers but the verbal feedback was not having the same effect, even though I felt that I was responding in a positive way. I hoped that changing a few words around would encourage a more consistent and positive attitude towards learning.

#### Implementation and summary of impact

‘And’ and ‘But’ are suggested (in NLP) to be small words that can be very influential if applied in the right way. My research activity showed that appropriate and careful use of these words can be powerful and influential in the classroom. Through my research project, I have seen the way in which they can motivate children to learn and take pride in what they have done which only serves to boost their confidence and make them eager to achieve well.

I am sure that many practitioners in the primary sector will be familiar with the concept of ‘Two stars and a Wish’ as a child’s technique for self-assessment. The use of ‘And’ and ‘But’ follows the same principle through teacher assessment and I have seen an improvement in the way in which my focus child applies himself to his work when I use this language as a strategy.

Previously, when responding to Child A’s work, I would always start with the positive aspects, for example whether he had achieved the success criteria, good content or use of vocabulary. I would follow this with ‘but...’ (your handwriting is untidy, you haven’t put your capital letters in the right place, you have no full stops etc.). Learning about language techniques through

NLP showed me how phrasing the language in this way and using ‘but’ following the positive language was in fact erasing all the praise and left the focus on the negative. As soon as I changed the order of the phrases around ‘but’ and adding ‘and’, for example:

*‘You missed out your full stops and forgot to use a capital letter for the proper nouns but your handwriting is excellent and you have used some really creative story words...’;*

I found I had a different child in my class, one who was motivated and eager to produce good work; and a child who took pride in what he did.

I became more aware of how I used language to assess the work of other children, particularly those of low ability, and made a conscious effort to ensure that I used ‘and’ and ‘but’ in a more constructive and positive way. This impacted on all children with regard to their motivation and pride in how they responded and presented their work.

### Case Study 14 – Sounds Good

**Tracey Burns** works in the Foundation Stage Unit at Mowbray First School as a Reception Class teacher.

#### Areas of NLP evaluated in the action research project

- Anchoring

#### Focus

Following on from my NLP training I decided that my focus would be around the use of music within my classroom. At particular points in the day I wanted the children to make connections between a specific piece of music and a specific behaviour, particularly ‘tidy-up time’ with the music used as an anchor to stimulate the different whole class responses.

#### Research Plan

I wanted to achieve a calm and effective way of getting the children to tidy up rather than constantly repeating the phrase ‘tidy up’. I also considered other times when I might be able to use music (i.e. a specific piece of music to initiate a specific behaviour). I decided that

“Specifically I aimed to develop and assess the use of ‘positive’ language to engage disaffected pupils.”

using music at ‘tidy-up time’ would, if it worked according to plan, make a significant difference to the inappropriate behaviour at that time.

#### Implementing the Research Plan

I had already identified the main times of the day when behaviour within the classroom was unacceptable and chose the one that I thought would be the easiest to implement changes in and would create a positive impact relatively quickly. The times identified when behaviour was inappropriate were:

- Tidying the classroom
- Coming into the classroom in the morning and after lunch
- Collecting their belongings for home time.

I talked with the children about tidying up time. We discussed why it was important to tidy away our things and how the children would be behaving if they were doing a good job of tidying. We discussed the way the classroom would look and sound if the children were tidying effectively and how it would look and sound when they had finished; and how I would look and sound if this tidying process was going how we all decided was an effective way to tidy up. Rather than saying that children wouldn’t be running, shouting, throwing toys etc, in true NLP fashion we said that the children would be walking, talking quietly to each other and carefully putting toys where they belonged – getting the children to visualise the positives rather than the negatives.

When it came time to choose an appropriate piece of music for tidy-up time I realised that this could make or break the success of the outcome. On a teaching practice the school I was in used tidy-up music but it didn’t create the state I was looking for in the children. The music used was the theme to ‘Mission Impossible’ that caused many of the boys to roll around the floor and shoot each other with imaginary guns (not what I was looking for!). I went to a local supermarket and bought a pack of four CDs costing only £4.99 containing a wide range of tunes and styles to suit every occasion. I played some of my chosen tune to the class and we all agreed that when this music started to be played it was time for them to tidy up. The tune has a part three-quarters

of the way through which seems like it has finished – which is great because if the children are doing a really good job and almost finished I turn the music off then, but if there is still tidying to do I leave it to run its course.

#### Summary of impact

The first couple of times I had to remind them it was tidy-up time and repeated this as they tidied. Now when the music comes on I hear some of them whispering to each other that it is ‘tidy-up time’ and others just start putting things away. There are still the odd one or two children who do need reminders about what is supposed to happen when they hear that music and I think there always will be, but on the whole I am very pleased with the way the children now tidy up. Sometimes I can hear them say the words just because I have got up and am on my way to the CD player.

Once a week we have a circle time for ‘Star of the Week’, when a magic balloon with someone’s name is passed around for the children to put all of their good thoughts in. The balloon then gets so full of good thoughts that it bursts and the name of the ‘Star’ comes out. I chose a piece of music to play so that when the children come in from lunch and hear it they know that they don’t sit in their usual place on the carpet but make a circle on it, very quietly, ready to find out who the new star is. This works really well, I don’t need to say a thing and it is wonderful to see.

### Case Study 15 – State and Language 1

**Ian McDuff** teaches at Astley Community High School.

#### Focus

Astley Community High is a 13–18 school, in a semi-rural area of Northumberland.

My particular interest was in developing my mentoring skills in terms of pastoral support by the use of NLP techniques. Specifically I aimed to develop and assess the use of ‘positive’ language to engage disaffected pupils. I decided to use the skills I developed on the first two days of the NLP course, during a three-day



“It has demonstrated to me that the use of simple but effective questioning techniques can dramatically affect the behaviour and attitude of pupils.”

Outward Bound course with my tutor group. This took place a few weeks after the first session in June 2008.

**Areas of NLP evaluated in the action research project**

- Milton model language

**Research Plan and Implementation**

During a 3-day Outward Bound course with my tutor group, I targeted one pupil with low self-esteem who often struggled to feel part of the group. This offsite programme would be a challenge to him due to his levels of physical ability, and his limited social skills. My aim was to evaluate how this pupil initially coped with his new surroundings and the challenges he was going to face. I was looking to consider any changes in his behaviour and the behaviour of other pupils within the group.

During the three-day programme, a number of team-based activities took place. This involved splitting the 22 pupils into typically four groups and setting each group a challenge in competition with the other three groups. The pupil who was the focus of my study (pupil X) would typically be the last to be chosen if pupils made team selections themselves. To avoid this the teachers chose groups.

Initially pupil X was reluctant to take an active role within the group: it appeared that he was afraid of ‘letting the group down’ or his team failing due to his lack of ability. However, with these being group activities, his weaknesses were balanced out and the team he was involved with was fairly successful. My first intervention came following the first set of challenges. I discussed with pupil X the emotions he felt during the tasks and how these changed when successes were achieved. I made sure that I emphasised that he was part of the success and without his participation the team may not have succeeded.

Building upon this initial discussion, throughout the remainder of the three days I focused on setting mini-targets for pupil X. These were sometimes part of team events and at other times individual challenges. When it appeared that pupil X was about to ‘give up’ or walk away from a difficult challenge, I reminded him

of his prior successes (*Remember what it felt like when you did... How do you think you will feel when you achieve... You can't do this... yet, Just suppose you could do this etc, etc.*).

In most instances pupil X fulfilled the tasks set out for him.

**Summary of impact**

There was a noticeable change in the attitude of other members of the group towards pupil X. They were aware of his physical limitations but as they saw he was trying to succeed and doing his best, they began to offer their encouragement. This had a further positive impact on pupil X. It was clearly apparent that he felt more accepted into the group by this encouragement. He felt part of the team, a valued player.

Without the NLP training, my mentoring of pupil X would not have been as successful. It has demonstrated to me that the use of simple but effective questioning techniques can dramatically affect the behaviour and attitude of pupils. Seeing the success with an individual pupil over a period of three days, I continue the use of positive questioning within the classroom environment. It continues to demonstrate a powerful means of influencing pupil behaviour and attitude. On returning to school, pupil X has become a more confident person. Other members of the teaching staff in other curriculum areas have noticed this. He appears to have lost a lot of his negativity with regard to school. His attendance level has also improved.

**Case Study 16 – State and Language 2**

**Louise Causer** teaches at Coulson Park First School.

**Focus**

Coulson Park First School is an average-sized school serving an area of social and economic deprivation. The focus for my research was to find out about how the main principles of NLP might impact upon my own professional development, and my teaching and learning strategies within the classroom. My main aim initially was to focus on state

management and how I could create a more positive environment using music and some NLP strategies. I also considered the use of re-phrasing language to ensure the children remained focused during carpet sessions and in group tasks. Finally I decided that as well as using rephrasing language I would try to use positive talk within the classroom.

**Areas of NLP evaluated in the action research project**

- Anchoring
- Milton model language

**Research Plan**

As my main focus links to my teaching and classroom management I hoped to impact both on the behaviour of the children and also their attitudes and motivations to their own learning. I became conscious that in my role as teacher I should try to create and encourage a positive learning environment for the children to achieve their full potential. I became aware that during the foundation stage the children are beginning to develop good learning strategies and an enjoyment of learning.

In order to identify the focus for learning I felt it would be beneficial to observe the children for a full week, continuing with my usual daily teaching style and taking notes on what I observed. I decided to identify different times of the day where I felt the children's state of mind could be improved. I observed them entering the classroom in the morning and after break times; and also within the class during tidy-up time and when getting dressed for PE. Having looked at previous research I decided it may be useful to sample various types of music at these times. I also observed the children during whole class carpet sessions and smaller group activities. I feel as though their attention at times needs to be refocused as we have a structured phonics session followed by the Literacy lesson. I hope the use of re-phrasing may help with allowing them to settle and focus quicker.

Having looked at the techniques linked to positive talk, I wondered if it would improve the general atmosphere within the class and also support children who at times display a negative state. During my planning phase I

identified my learning and change focus as: To create a positive learning state within the classroom. I have created specific learning objectives to follow during my research.

**Personal learning objectives:**

- To use music as a form of creating an atmosphere that encourages a positive state of mind for learning.
- To change phrases to have a positive effect on the time taken for children to settle to tasks.
- To use positive talk to give all children a positive state of mind.

**Success criteria:**

- Children will have a positive state of mind ready for learning.
- Children will settle and focus on the task more quickly.
- Children will display a positive attitude in the classroom.

How will I know that my learning objectives have been met?

- There will be a calmer atmosphere in class and the children will settle quickly, ready to learn.
- All the children will be focused on the tasks.
- The children will be positive about their work and confident in their own ability.

I decided to evaluate my progress in my own learning through discussions with my teaching assistants and through my own observations. I included the feedback I received from the children in the class and considered the success criteria in relation to the impact on the children's learning.

**Implementing the Research Plan**

I decided to trial different types of music at the times of the day I identified during my observation period. I played music when the children entered the classroom in the morning, and when they returned from playtime and lunchtime; I also trialed music when they were getting dressed for PE and when tidying up the classroom. I decided to use classical and calming music for all times except when



“The positive talk area of my research linked strongly with the rephrasing and quickly became significant to my personal role as a teacher and also to my career professional development.”

tidying the classroom. I used a faster piece of music when tidying, but found that the fast music made the children much more unsettled and the tidying became frantic.

After observations I decided to use more calming music. The children didn't seem aware of the music in the morning as they are instructed to come straight in and get a book from the reading corner to look at. I decided not to continue using the music at this time as I felt it could be distracting. The main aim for using the music when the children are dressing for PE was to try and speed up the process. The music didn't seem to improve this, therefore I decided to use a much shorter piece and encourage the children to be on the carpet when the music ended.

During the observation I decided to ask my teaching assistants to note some of the common phrases I use during the whole class teaching sessions. We noticed that I often used similar phrases to try and gain their attention and when refocusing the children – often negative phrases such as ‘don't, can't, etc.’ I found it quite difficult initially to think of how to make the phrases more positive so I tried to note some down and practise with small groups. Some of the children in the class are focused at all times but there are specific children who require more time to settle. I feel I already use some positive talk to focus the children (e.g. highlighting the children who are smart or listening well). I hoped that using a range of more positive phrasing may save time and keep all the children focused on the tasks.

During observations I noted that a number of the children seem to lack confidence during writing activities in small groups. My original focus was to try and use positive talk at all times and I feel I addressed that when looking at rephrasing. I also felt it would be useful for the children to avoid negative phrases such as ‘I can't’ during group tasks. I tried to work with the identified group of children all together and tried to make them feel more confident in their own ability. We decided that we would all be brave and have a go and be positive. Upon completion of each activity the children place their own spider on the web if they have achieved their success criteria. I used this to encourage positive talk whilst they placed their spider (i.e. I can ...).

I also decided it may be useful to extend the positive talk to general instructions in class such as ‘put the chair back on four legs’ instead of ‘don't swing on your chair.’

#### Summary of impact

Following the completion of my research project it became clear to me that there were in fact three specific areas that I have addressed and therefore need more time than I thought to evaluate the impact they each had on my own and the children's learning. I intend to continue looking at the impact of using music in the classroom and feel I need to investigate this area further within the class, trialling different types of music and assessing the impact over a longer period of time. As a whole school we already use ‘Wake up and shake up’ in our daily classroom routine. I hope to show that we could incorporate music in other areas to improve our teaching and classroom management.

From discussions with other members of staff it also became apparent that we could use music during activities such as handwriting to focus them on the task. On reflection the rephrasing aspects of my research seemed to indicate a greater impact on my own practice and I am much more aware of using positive phrases when working with the children. The effect on the children was more difficult to evaluate as the time taken to settle didn't appear to differ significantly. I will continue to avoid the use of negative bias phrases when teaching and have verbally discussed this with others in the foundation stage. The rephrasing aspect of my research is something I have identified as an area I can focus on for my own professional development in the future.

The positive talk area of my research linked strongly with the rephrasing and quickly became significant to my personal role as a teacher and also to my career professional development. I feel that the skills I learned during the four days and in the research I conducted have had a significant impact on my teaching style, and we were left in no doubt that this had had a positive effect on specific children and they were much more responsive.

I feel I have gained an enormous amount personally from both my own project and the Leading Thinking work with John Carey.

“I wanted to look at how young children develop their early reading skills.”

I began the course feeling very anxious and with the belief that I was lacking in confidence. Throughout the four days I quickly became aware of the positive impact of NLP on the way I speak to people outside school, members of staff and the children in my class. In particular the effect upon my teaching and classroom management is significant and I can now create the way I want to feel using designer states. I am more relaxed and confident in class: as a result the children appear more settled and thus we have a more positive environment.

I will continue to trial the use of music in class as I feel it will impact on the children's readiness to learn. I will continue to avoid negative bias and hope this will have a positive impact on the children in the future. From a personal point of view the most significant aspect of my research work was positive talk. This whole area had the most effect both on my own teaching and on the children's learning. I am aware that I need to continue to practise the skills and will use this as a focus for my professional development. I was amazed at the effect this had on the beliefs and attitudes of the small group of children I worked with. I am excited to begin the new term with my new class and hope to use more of the NLP strategies and techniques.

### Case Study 17 – Teaching Reading

**Zoe Ryan** is a Foundation Stage teacher at West End First School.

#### Focus

The Leading Thinking course was aimed at developing leadership skills and observational skills relevant to teaching today. It was originally aimed at pre-threshold teachers but offered initially to teachers from schools successfully using ‘Thinking for Learning’ strategies. West End is a school where the majority of teachers were post-threshold and I was offered the opportunity to partner the member of staff eligible to apply. I felt it would help further my understanding of thinking and therefore help me within the classroom, but also help me observe the nature of interactions amongst the adults in school and work towards team building and senior management.

#### Areas of NLP evaluated in the action research project

- Eye accessing cues
- Spelling strategy

#### Research Plan

The areas studied looked at how people think and interact, how we communicate and how the language that we use can have an impact on how we perceive or are perceived. We were trained to ‘notice what you notice’ (sensory acuity), to see small signals that can give us an insight into how a person thinks, which areas of memories or feelings they may be accessing to recall or give information. These small signals are often amplified in children and can give teachers an indication as to the child's learning style and how the child may ‘see’ things. I hoped to be able to use these strategies when working with children to help me understand how different children approach the same task and how as a teacher we can give each child the opportunity to achieve to their potential.

I decided to look at an area that has fascinated me as a teacher for a long time. I wanted to look at how young children develop their early reading skills. As a teacher working with young children it is very noticeable how some children can be stronger at developing their reading skills using phonetic strategies, whereas others may find it easier to learn a ‘sight vocabulary’ and a look-and-say technique. Through the NLP training we were given an insight into how people's eye movements can give an indication of their thought processes. It was emphasised that the model given would not apply to everyone in the same way but could possibly give an insight into which memories or skills people were using. I decided to try and use the eye accessing cues with children demonstrating a significant strength in either phonics or look-and-say.

#### Implementing the Research Plan

I highlighted six children who had a strength in either using a phonetic approach when reading/writing or who used a look-and-say approach, focusing on using words they had previously memorised. I ensured there was a mix of boys and girls so that I could observe any differences

“ I have been able to use many of the strategies we were shown during the Leading Thinking course both in the classroom and also in my professional life. ”

between genders. I worked one to one with each child observing their eye accessing cues to see if any patterns emerged. I needed to position myself so that I could observe while still interacting with the child. I gave each child a set of pictures for CVC words. Initially we talked about what the pictures might represent and I then encouraged the children to attempt to write the words beneath the pictures.

Child A is a child who employs a mainly look-and-say approach. When selecting the letters she needed to write, Child A was observed to look upwards to her right for the majority of the letters, and to close her eyes at times, all indicating from the eye accessing cues that she was visually constructing the letters before writing them. She needed no help in remembering the letter shapes.

Child B is a child who employs a mainly look-and-say approach and has an excellent sight vocabulary. When selecting the letters she needed to write, Child B was observed to look directly upwards; for some of the words she did not stop to think but wrote the words straight away. This seems to indicate from the eye accessing cues that she was visualising words she was unsure of and writing others from memory without having to visualise individual letters.

Child C is a child who employs a mainly look-and-say approach, with a reluctance to attempt to use sounds to blend words. After deciding what each picture represented Child C was reluctant to attempt to write and needed encouragement to write anything. He was observed to look directly upwards and then with encouragement would write the appropriate letters. When unsure he could be observed to look upwards and then immediately downwards and to his left, as though he was searching for reassurance.

Child D is a child who employs a mainly phonetic approach. When selecting the letters to write, Child D was very confident and wrote many without hesitation. For the few sounds he was unsure of Child D was observed to move his eyes directly to his left and then down to the left. Using the eye accessing cues this would suggest that he was auditorally remembering the sounds and self talking.

Child E is a child who employs a mainly phonetic approach. When selecting the letters to write, it was observed that Child E made very clear, almost exaggerated, eye movements. He would initially move his eyes directly to the right and then immediately to the left. This pattern continued throughout with him looking down to the left on one occasion. Using the eye accessing cues this would suggest that he was mainly auditorally remembering the sounds and occasionally self talking.

Child F is a very confident child, employing a mainly phonetic approach. Child F was able to write all the relevant sounds without giving any eye accessing cues. She could have been using strategies but was very confident and wrote the words without hesitation.

On reviewing the results there seemed to be a clear indication that the children who had a strength using look-and-say were visually constructing the words. They could 'see' the letters and were then able to write them down. The children who have a strength phonetically were hearing the sounds or auditorally remembering the sounds and then transferring the sounds to the letter shapes.

All the case studies and research projects took place over the period of one school term. This would seem to strengthen the argument for a varied approach when helping children learn to read using a combination of strategies encompassing visual, auditory and kinaesthetic. So children can see, hear and physically manipulate the words we are helping them to learn.

#### Summary of impact

I have been able to use many of the strategies we were shown during the Leading Thinking course, both in the classroom and also in my professional life. I have had very positive feedback from observations when I have employed some of the strategies and I have also noticed from the children's behaviour and their response to me what a positive effect they can have. The findings from this research have influenced my approach to teaching reading in that it has shown how important it is to use a variety of techniques to include all learners. Using a primarily phonetic approach may not work for our visual learners looking at

“ ... I hope to be able to motivate the children and encourage positive attitudes towards being in the classroom especially at tidy-up time. ”

the shapes of words, and a look-and-say approach doesn't necessarily give the auditory learner the stimuli needed for them to progress. Although as teachers we are aware of different learning styles, it is important to encompass these within our teaching.

I have continued to learn about the impact of positioning, language and presentation and how this can influence people's/children's perceptions. I plan to complete the NLP Practitioner course to enable me to become an NLP Practitioner and will continue to use the ideas and strategies within my teaching, as I have found it can have a significant impact on both my own and my pupils' understanding. I then plan to continue to disseminate my training within school.

I was given the opportunity to lead a staff meeting to share some of the information with the whole school staff. We were able to use some of the activities from the Leading Thinking course to give the staff some experience of our training and a brief insight into NLP. The staff were very receptive to the strategies they were shown and there was a lot of interest as to how they could employ the strategies within their own teaching. Our dissemination was greeted very positively and it demonstrated how receptive people were to new ideas. I hope to continue to share my learning with my colleagues as I continue my NLP training.

#### Case Study 18 – Thank You for the Music 1

Louise Lightley teaches at Wansbeck First School.

#### Focus

Wansbeck First is a large school in Ashington, Northumberland. The focus of my professional learning was to gain more insight into the principles of NLP and see if I can use these to influence my future teaching and learning. Through attending the course and carrying out research within school, I hope to use what I learn to further develop my leadership and coaching skills as I approach threshold. Using what I have learnt during the course and through speaking to colleagues within my own

school as well as others within Northumberland I hope to be able to motivate the children and encourage positive attitudes towards being in the classroom especially at tidy-up time.

#### Areas of NLP evaluated in the action research project

- Anchoring

#### Research Plan

When deciding upon the focus for my learning I thought about what issues I felt were causing disruption within the classroom for the children as well as thinking about which times of the day I felt most stressed out by the children's behaviour and the lack of routine. Having listened to John talk about anchoring and how it could be used within the classroom I felt that this would be something that I could try with my Reception class. I decided to focus my trial with my group of lower ability children to begin with, with the possibility of extending the research to all of the Reception classes within school. I also decide just to trial it when tidying up at the end of each session.

#### Implementing the Research Plan

I decided to trial a piece of music at tidy-up time at the end of a session in order to aid the children to tidy up quietly, co-operatively and responsibly. I wanted the music to act as an anchor which would tell the children that it was time to tidy up and encourage them to do so in a positive way.

To begin with I discussed with the children what they felt that good tidying would look like in our classroom. They said many of the things I hoped they would, such as quiet, sensible, quick, no silliness. I then introduced them to my chosen piece of music taken from the Sorcerer's Apprentice. We discussed what this piece of music made them feel. We used this piece of music for the first week of the trial, and to begin with the children responded well; however, after a few days the children soon went back to their old ways of not tidying up quickly or sensibly.

We then tried using some music taken from the Harry Potter films and the children said that they would be able to do 'magic' tidying. However I found that when I played this music many of the children got very over-excited,



“ I have gained a great deal of knowledge, which will influence my future teaching as well as other areas within my life. ”

which resulted in a noisy and distracting atmosphere. I spent some time discussing my learning with my colleagues and the nursery teacher suggested I trialled the tidy-up music which they used in the nursery. The first time I used this music I didn't discuss it with the children, but when they heard it they recognised it as the nursery tidy-up music and instantly responded to it. I believe that this is due to the strong anchor which was created during nursery and the children still related the piece of music to tidying up. I intend to use this music in September with my new Reception class.

#### Summary of impact

I have gained a great deal of knowledge, which will influence my future teaching as well as other areas within my life. I feel that through my introduction to NLP it has changed the way I communicate with people and I'm now far more aware of how and what people say to me. Through my research project I believe I have now confirmed to myself the strength of anchoring and I intend to use this further within my classroom. I am now working more closely with the nursery team to ensure continuity in the music we use within Foundation Stage classrooms for things such as tidy-up time, milk time and assembly time. This is something that I am hoping to discuss implementing throughout the rest of school.

I have had the chance to observe the children closely throughout this research time and I believe there has been a significant change in their behaviours around the classroom. There is a positive atmosphere within my classroom and I feel that this has helped the children and me to work effectively and happily.

#### Case Study 19 – Thank You for the Music 2

**Nigel Maddison** teaches at Wansbeck First School.

#### Focus

Wansbeck First is a large school in Ashington, Northumberland.

The focus of my professional learning was on impacting on many areas including attitude,

behaviour and motivation. I decided upon this focus so as to aid my personal target of developing better classroom management.

#### Areas of NLP evaluated in the action research project

- Anchoring

#### Research Plan

My initial idea was to impact upon pupils' learning through time and behaviour management. This particularly manifested itself as wasted time at the end of the school day and a decrease in available teaching time. Through discussion with colleagues and mentors I decided to introduce a piece of music as a cue for pupils to tidy up and prepare themselves for home time in the classroom. This had become somewhat of a battle of wills as pupils wandered around chatting and looking around while both staff and parents waited.

#### Implementing the Plan

Following discussion with the pupils where they agreed that this was a problem, as many of them were also frustrated at waiting for their classmates, and identified preferred behaviour, a well known piece of music was chosen. This was 'The Sorcerer's Apprentice' which the pupils knew from the Disney cartoon, *Fantasia*. This was considered a suitable choice as the pupils identified with the fact that the character in the film is attempting to tidy up as the music plays. The pupils reacted well to the music beginning and often prompted each other to begin clearing up. Although this continued to be quite noisy as the pupils played along with the music and acted out the cartoon, gradually I was able to reduce the amount of time allowed for clearing up by fading out the music. At this time other pupils would often be hurrying their classmates along in order to be ready before the music ended.

It became clear that both my own and the pupils' initial expectation of a quiet and ordered end to the day was somewhat unrealistic. In many cases the pupils had described behaviour that they obviously felt was what someone else expected from them. By using the music at a specific time a definite impact was made as the amount of time wasted at the end of the day was substantially reduced.

“ My training was relevant to my pupils' learning because it not only developed my teaching and management style but it enhanced the classroom environment for the children. ”

#### Summary of impact

This has shown me that using musical cues can have a positive influence upon pupils' actions and behaviours. The choice of music was possibly unsuitable in some respects as it was quite a lively piece which did not particularly lend itself to a quiet environment, but once begun I was reluctant to change the music as the immediate reaction of many pupils to it was very positive. I would definitely use this technique again and have given some consideration to its use at several other times of the day. Initially the pupils reacted in a number of different ways. Some took a leading role and urged others to join in as they realised the music had started, while others remained quite noisy and uninvolved. Over time the pupils responded to their peers and all reduced the time it took them to be ready and settled.

#### Case Study 20 – The Eyes Have It

**Janice Woods** was a teacher at Bedlington West End First School during the project.

#### Areas of NLP evaluated in the action research project

- Eye accessing cues
- Milton model language
- Spelling strategy
- Visualisation

#### Focus

I wanted to find out more about Neuro-linguistic programming as a new teaching and learning strategy, and I wanted to explore ways in which it would benefit my class – and as a result of my research, a particular child in my class. My training was relevant to my pupils' learning because it not only developed my teaching and management style but it enhanced the classroom environment for the children. This in turn opened up learning opportunities for the children and enabled them to access the curriculum and other aspects of school life more fully.

#### Research Plan

My main aim for my own professional learning was to find out about the principles of NLP

and consider how they could impact upon my teaching and learning strategies in the classroom. I planned to influence others by preparing and delivering a staff meeting on the basic approach of Neuro-linguistic programming. I also planned to encourage staff to use the strategies and to provide me with feedback about their beneficial effect in the classroom.

I had a little girl (K) in my class who attained at a high level in comparison with her peer group. She was very articulate and visibly enjoyed every aspect of school. Her writing was interesting and she had begun to use a wide range of vocabulary both orally and in her writing. Her spellings were extremely erratic, yet every week she would get each and every spelling she had 'learned' correct in her spelling test. Ask K to spell the word again directly after the test and she found this almost impossible. After working with K for a while on phonic strategies to overcome this, I noticed her eye movements differed when she was actually undertaking the learned spelling test and when being asked to spell the word independently. I spoke to my trainer about this and did some further research into eye accessing cues and the NLP spelling strategy.

I spoke to K's parents about the spelling issue. They themselves had identified that there appeared to be a breakdown in K being able to 'spell' the learned word by rote and use recall skills to spell the word in a different context.

#### Implementing the Research Plan

Initially my plan did not include the use of a teaching assistant. However it was especially difficult in Year 2 during the SATs period to dedicate enough personal time to K on a one-to-one basis. The TA therefore worked with K on a daily basis at a set time to provide routine and structure. I also found that while working with K I began to use NLP techniques more confidently with the rest of the class and in my personal life! Although my original plan to work with K did not change, I did change my approach when working with or teaching word level work to other pupils which they reacted to favourably. I also worked closely with another member of staff who had a pupil with behaviour problems. By approaching the way they spoke to the child (given my NLP coaching to them)



“The effects of NLP have had a massive impact on me personally and as a result of my training and new approaches I have moved on to a new school with a promotion.”

they found that the child reacted differently and began to respond to embedded commands or positive reinforcement. This was an additional benefit of my research.

#### Summary of impact

The impact of the support received has been phenomenal and life changing. That may sound extremely corny but the techniques taught by my coach have impacted on all areas of my life. For example, lack of confidence in certain situations, fear of flying (using visualisation techniques) self talk, embedded commands – the list is endless. It has made me think very carefully about how I speak to people as the response I get from someone mirrors the way in which I ask the question. This has been brilliant to use in the classroom as my children have responded very favourably and even parents noticed a change in the way children responded. My coach was brilliant and supported me, and my course colleagues, through every step – encouraging, guiding and letting us learn for ourselves.

The impact on pupils in terms of their learning and behaviour has been brilliant. The child I used as my research target improved her spelling ability and became more confident. She began to use the way she recalled her spellings to help her remember other areas of the curriculum and her parents were very pleased with her progress.

The effects of NLP have had a massive impact on me personally and as a result of my training and new approaches I have moved on to a new school with a promotion. I shared my learning with others very enthusiastically and during the staff meeting on the basics of NLP actually found that because I was delivering the presentation using NLP techniques (embedded commands etc) staff reacted very differently. I feel I have had a positive impact on the practice of others. Lots of people: teachers, managers, parents, teaching assistants, friends etc have all given me very positive feedback on the approaches I have used. It has also been pleasing to see that some of these people went away and maybe bought a book on the subject that will ultimately enhance their own practice.

### Case Study 21 – Visualisation and Anchors

**Erica Tait** teaches at Malvins Close First School.

#### Focus

Malvins Close First School is two-form entry with over 300 children. The focus for my own personal learning was to develop and strengthen my own skills, particular regarding communication and behaviour management not only in the classroom with the children but also as a leader within school. I hope to gain a greater understanding on how NLP can be used to support these areas within a school focus. I decided upon this focus so as to aid my personal target of developing better classroom management. I aimed to explore whether the children would gain a greater understanding of their own self and hopefully this would have an effect on how they communicate and share emotions with others around them. I also sought to identify if this might also have a knock-on effect on their behaviour and self-esteem within their own lives.

#### Areas of NLP evaluated in the action research project

- Anchoring
- Submodalities
- Visualisation

#### Research Plan

After discussing several approaches with my teaching partner, I decided to focus my learning on an area that had been identified in past performance management objectives: behaviour of children. This is also a personal objective as I feel by developing this area it will help with my own confidence when dealing with others in and out of school. I focused my work around a specific group of children who have been identified as having some problems with social interaction and self-esteem. As the group is very small (one girl and one boy) I looked at each individual case rather than making generalisations.

During our NLP training, I was particularly fascinated with how discussions and

“As a teacher I have become a great deal more confident when dealing with difficult children or situations, and I believe this is solely due to the experience I have had using NLP methods.”

visualisation techniques linked to anchoring could have such a positive impact upon a person’s emotional state and their own perceptions. Therefore I felt that I would like to delve into this further to see whether I could initiate such strong responses within my own practice in the classroom environment. After meeting with our SENCO we decided to target two children in Year 2 who had been identified as having social/emotional difficulties.

#### Implementing the Research Plan and summaries of impact

##### Case Study 1

After speaking to her parents after school, I identified that Child A was getting really upset and worried at home for no apparent reason that the parent could see.

It was evident that she had no coping strategies for dealing with her emotions after specific events at home and school. So I chose a time in the classroom where we would not be disturbed by other children and decided to use Submodality Comparison Checklist to gain a greater insight into her own feelings and perceptions when she got upset. I felt it was vital that I didn’t ask her too many questions about why she was upset and instead focus on an approach to cope with her feelings in difficult times.

First of all she thought of a sad experience. She said she could see a room straight in front of her eyes, and that it was very dim with ‘pointy bits’. She also used her arms to represent something heavy pushing her down. After that we focused on a positive experience, and her face immediately lit up. She said she could see a photo of her friends which was yellow and bright. She looked up to her left slightly when she was speaking to me so I knew that this was where I wanted to anchor this feeling. She also said that there were giggling noises, which made her laugh. I brought the picture closer to her face and she immediately laughed, which gave her a bit of a shock! We then discussed the benefit of the feeling and how she could use this picture/feeling when she felt that she couldn’t cope with a sad feeling at home or school.

For the rest of the week she caught my eye and looked at the direction of the picture and smiled. Two days later her mum came in to

tell me that she had changed at home at night times. Child A had even told her mum that she has her own picture that makes her warm inside. One week later she even managed to sort out a disagreement with a group of friends by saying ‘I can help us, I like it when we are happy. I know I make them feel warm like friends can’.

##### Case Study 2

Child B was identified in the target group as he had a very disruptive and unstable home life. As with Child A I began trying out the anchoring approach, but soon realised that he was just giving me answers that he thought I wanted and began to lose interest. So I decided to use the approach of setting goals with him. Using specific questioning such as ‘How do you feel?, What do you want to happen?, How can you do this?’ really helped to provide a framework for our discussions. As I knew I couldn’t influence or help him at home, this strategy helped to give him confidence in his own ability to be in control of his emotions and the opportunity to set his own goals to strive for.

Anchoring has enabled Child A to express her emotions much more at home, and has given her the confidence to tackle new or uncomfortable situations in a positive way as opposed to how she coped before. Child B is now much more aware of his own capabilities and is much more engaged at school. He often comes to speak to me about how he is getting on in his new class and his teacher even commented on how good he is at seeing what he needs to do to set future targets for himself.

After speaking to other teachers in school it has become apparent that both children have gained a great deal from NLP. It has been commented that Child B is much more focused and calm in the classroom. He also appears happier in himself in school.

As a teacher I have become a great deal more confident when dealing with difficult children or situations, and I believe this is solely due to the experience I have had using NLP methods. I have learnt so much during this journey. All the training we had at the beginning was invaluable and our coach was a real inspiration to me. I not only understand the huge impact NLP can

“ I found the Leading Thinking course fascinating and my mind was opened up to a plethora of new approaches.”

have on people but also, and probably more importantly, the impact it has had on myself as a person. I am much more aware of how I perceive myself now and how I can influence and change my own states. I have also become more confident in my job and in social situations outside of work.

I found it really useful sharing knowledge with other professionals, and hope to continue this in the future.

### Case Study 22 – Wide Ranging Approach

Jaqueline Lorimer teaches at Broomley First School.

#### Focus

Broomley First School is located in Stocksfield, Northumberland, a fairly affluent village within easy commuting distance from Newcastle. It is in a rural setting with an active community spirit. My focus was to work with a number of NLP approaches and techniques with a view to improving the engagement and achievement of one of the children in my class who has a variety of learning challenges.

#### Areas of NLP evaluated in the action research project

- Anchoring
- Meta model questioning
- Milton model language
- Non-verbal communication
- Visualisation

#### Research Plan

An immature child, who lacked confidence and was performing well below average in his class, needed my attention. The youngest boy of three, he was easily distracted in class and considered himself to be of low ability. If the lesson focus was one that he perceived as out of his comfort zone, he would quietly withdraw. He was not a disruptive child and would rather not attract any attention (good or bad) to himself. Verbally, his diction was poor. He did not pronounce ‘c’ or ‘g’ correctly. His written

work reflected this immaturity. Letters were not formed correctly and he applied little pencil pressure to the page. His upper body strength was poor and writing appeared to be quite an effort for him. He found it difficult to know what to write and needed lots of encouragement to put pen to paper. In the playground, he was a quiet but sociable boy who played with a variety of children.

He was beginning to feign illness in order to avoid coming to school.

I wanted him to:

- work independently
- approach lessons with a ‘have-a-go’ attitude
- improve his concentration span
- enjoy coming to school
- feel proud of his work.

I would hope that achieving the above would result in an improvement in his written and oral work. I found the Leading Thinking course fascinating and my mind was opened up to a plethora of new approaches. I contemplated carefully which would be of most use for this child and decided that, in his case, several were appropriate. I came to the conclusion that I had a short time to make a difference in this child’s school life, that many of the techniques would work well together and that I could make the child my focus instead of one specific method. I appreciated that this approach, if it worked, would make an analysis of specific success criteria difficult. However, his needs were great and varied, therefore a strong, collective approach was necessary. I would use: visualisation techniques, Teaching Influence cards, body language, anchors, peer support and the meta model.

#### Implementing the Research Plan

I implemented the following techniques whenever possible within the classroom. At no point was he singled out, removed from class, given any more attention than the others or made to feel ‘different’. My intention was that he would be unaware of my focus, as would the remainder of the class. In order to do this, I used many of the techniques with other children in the class.

“ I read through what he had already written with him, reading the story with expression and letting him feel the atmosphere through my voice and actions.”

#### Visualisation

The first time I used this with him was to try and boost his confidence. I asked him to imagine a time when he felt good about a piece of work he had done in school. His body language immediately demonstrated how difficult he found it. His upper body visibly tensed. He screwed up his eyes tightly, instead of just closing them. He gave one word answers and was breathing quickly. He found it difficult to sit still.

At this point, it was obvious that he was conscious of his low ability and embarrassed about it. A week later, as a class we were writing adventure stories and I wanted to improve his simple story approach (his stories were basic and peppered with the word ‘and’).

I read through what he had already written with him, reading the story with expression and letting him feel the atmosphere through my voice and actions. I then asked him to close his eyes and see if he could picture the last scene (him and two friends having a sleepover at another’s house). I asked him to keep his eyes closed and describe the bedroom to me. He did so, a bit tentatively at first, but was relaxed throughout. I asked him to tell me how he was feeling. He replied ‘excited’ so I asked him what was making him feel excited. ‘Because we are going trick or treating’ was his reply. I got him to record this sentence and asked him to do another by himself in the same way.

When I returned, he had written that they had been trick or treating and were back at another’s house in bed. I asked him to tell me what happened next. He closed his eyes (unprompted) and described a shadow coming closer and closer. I asked him to write the sentence down, which he did and with confidence! I then asked him to close his eyes and go back to the image. I asked him how he felt. He said he was frightened, that the shadow was an evil pumpkin which ran into the room and took his friend. Having written this down, he said he thought this could be his cliff-hanger. We left it there for the day.

Over the next couple of writing sessions, I continued to drip-feed him with this technique. The result was a much improved, interesting

story with more detail than I had hoped for! He was relaxed during these sessions and twice referred to doing it on his own outside the lesson. I was delighted to find whilst discussing settings for stories, that when I asked each child to tell me where they were at 5:30 the night before, his reply was ‘I was writing an adventure story in the dining room!’ His reply was casual and not intended to impress (he looked genuinely surprised when I reacted excitedly!). I spoke to his mother that evening and she confirmed that they were amazed at his new-found desire to write at home.

#### Teaching Influence Cards

I used the Teaching Influence Cards by selecting one a day. I wasn’t always successful in slotting them into my day but found that, after a couple of weeks, I was re-using them naturally. I also found that I was thinking more about how I phrased instructions.

‘Remember a time when...’ I used when talking to him on his own but also with the whole class when trying to create a bank of words for story writing. For example ‘Remember a time when you were scared. Describe the feeling.’ elicited the responses: ‘sweating’, ‘hands wet’, ‘shaking’, ‘trembling’, ‘terrified’, ‘white’, ‘pale’. For me, the success of this suggestion was in his rapid response and his enthusiasm when answering. He no longer looked out of his depth and he was physically more settled in his seat.

#### Examples:

##### ‘Just imagine...’

‘... how good you’ll feel when I show your parents your work because I’m so proud of you.’

##### ‘The fact that...’

‘... you’re putting your hand up means that you are finding these problems easier to do.’

##### ‘I’m not going to tell you to...’

‘... concentrate hard because I know that you want to do your best.’

‘... work quietly when I am working with this group because I know that you have lots to get on with.’



“When I first ‘targeted’ him, he was very conscious of my presence near him in class and appeared uncomfortable...”

### Body Language

When working together, on several occasions, I mirrored the child’s body language in an attempt to relax him and make him feel comfortable with my presence. When I first ‘targeted’ him, he was very conscious of my presence near him in class and appeared uncomfortable when I sat close to him (shifting and fidgeting, looking in my direction frequently) even if I was working with another child. However, I believe the mirroring of his body language did have a positive effect on him. He had visibly relaxed by the end of the first week and even looked disappointed if I worked with a child close to him without interacting with him.

### Anchoring

Interestingly, during the study period, I have introduced only one main anchor. When I want the children’s attention, I raise my right hand. They have then to mirror the action and stop speaking. I explained to them that they should not tell others who are unaware that I have my hand up but should look in their direction and wait for them to follow. My study child very quickly picked up on this anchor and was one of the first children in class to respond. However, I did notice one occasion when he was so engrossed in his work that he was one of the last!

### Meta model

When required to complete a long task, he would frequently make the excuse that he was tired. During class, one morning, he yawned and I asked him if he was tired. He replied that he was. My questioning was specific and did not include the word why. A class debate about suitable bedtimes ensued. Having ascertained that he went to bed every night at 10pm, I asked him if he would be willing to try an early night. He was happy to try and I had a short discussion with mum after school about it. She explained that, although he went to bed earlier, one of his siblings was keen to keep him awake. He came into school the next morning and told me he had managed to get to sleep before 9 o’clock. There was only one day in the next two weeks that he appeared tired but he did not complain.

The meta model made it difficult for him to be defensive about his sleep habits and he was more open to suggestion as a result. He was

able to give his own opinion and listen not only to mine but also to those of his peers.

### Summary of Impact

Prior to their main writing lesson, the children work collaboratively and I feel that this is an area where I, and his peers, have seen his greatly improved self-confidence. He is now happy to share his ideas because he believes they are good. He enjoys his stories and is keen for them to be read aloud to the class. His spelling has not improved greatly, which makes his work difficult to read at times, but sensitive pairing has worked well.

He is genuinely proud of his work. He is keen to start and is beginning to apply more pressure to the paper when writing. I believe this is due to his increased self-confidence. When looking at his work, it was possible to see the sentences that had come easily to him as they were bolder. He was asked to paint a watercolour picture for the front cover of a book. I was amazed at how quickly he started to sketch (previously he would have asked for direction) and impressed at how relevant to his story the finished article was. He was rightly very proud. He now perceives himself to be great at maths – this perception has been strengthened by his peers. Several children have noticed the difference in his class participation and have commented on it ‘Is he going to be in the top maths group now that he’s so good?’

### Conclusions

He is now a much more confident boy who takes pride in his work. His alertness in class has greatly improved (his hand is up frequently, he volunteers, positions himself towards the speaker and yawns less!). His sitting position is more relaxed and natural and his feet are flat on the floor. His body language demonstrates his new confidence. He doesn’t fidget, yawn or look to the ceiling tiles for inspiration.

His maths work has moved from just below average to above average. Writing is less of an effort for him and this can be seen in the greater quantity he produces and his desire to finish his work.

His use of visualisation has improved the quality of his writing. His ideas are developed

“I learned an enormous amount from the course, an array of different strategies.”

and are more interesting. His improved confidence is illustrated through his class participation and frequent smiles. His handwriting has improved, as has the pencil pressure applied to the page. He is choosing to write stories at home for pleasure! He believes he’s ‘great at maths’ and is enjoying the well-earned admiration of his peers.

### Personal Development

I am delighted with the results of my efforts and am fascinated by the power of NLP. Based on the difference I have been able to make to this child’s learning, I am certain to use and develop these techniques with many others in the future.

## Case Study 23 – Words that Work

**Diane Murphy** is Head of Department in Duchess’s Community High School.

### Focus

Duchess’s Community High School has over 1200 young people, and is in Alnwick, Northumberland. This is my 6th year of teaching and the NLP course available to pre-threshold teachers in our region was an ideal opportunity to review my teaching style and introduce and develop a new way of working. I aimed to introduce some of the NLP strategies into my teaching and also to use them to develop the relationships I have with staff and students in the daily routines within the department.

I hope to see if they would have an impact of the level of attitudes, engagement and therefore attainment of the students I teach, thus raising their self-belief and motivation.

### Areas of NLP evaluated in the action research project

- Milton model language

### Research Plan

I learned an enormous amount from the course, an array of different strategies. However, at this time of year at school my teaching timetable is limited (as Years 11, 12 and 13 are all on study leave and Year 10 on work experience)

so I have decided, in conjunction with my coach and from discussions with Gillian (a colleague also on the course, as we decided to co-coach each other) to focus on a couple of aspects of NLP. The aim of this project was to use the Milton model and specifically Yes Sets in my dealings with students and staff within the department. I focused on students who have behaviour/attitude problems within class and whom I have therefore become involved with as they have had to be removed from the class or I have had to intervene to allow learning to continue. I wanted to determine whether I could impact on the level of engagement and attention of these students by altering my language patterns to include those of the Milton model and turn their focus from the negative behaviour to the positive.

### Implementing the Research Plan

Once the initial training was completed the project was implemented by focusing on any students who were displaying attitude and/or behaviour problems in the classes within the department. Also there was one class who are a very mixed group of students both in ability and attitude, and whom a colleague had been experiencing classroom management problems with. This teacher is very experienced and had tried out an array of different behaviour for learning strategies, with varying degrees of success.

Almost immediately an opportunity to try out my new skills presented itself – a student in a Food Technology class became involved in a confrontation with a teacher upon entering the classroom. The teacher brought her to me; both were in a heightened state of emotion. I asked the student if she had her ingredients (I could already see that she had – so was guaranteed my first yes!), I then asked what she was planning to make (not another yes but a positive response non the less) and so I then said ‘You like cooking so we are going to have a good lesson today, aren’t we?’ To which she replied ‘Yes’. I then said I would pop in and see what she had made at the end of the lesson. She went off into the class and got set up. I could see the teacher wasn’t very pleased with the way I had dealt with the situation but didn’t have time to explain at the time as I was also teaching a class. I went into the Food Technology class at the end of the lesson and



“Through the four days’ training I now have a greater understanding of myself and how I work and think.”

heard that the student had had a good lesson, so praised her for both the practical outcome and her positive attitude.

After the lesson I briefly explained the reasons for dealing with the situation in the way I had and reflected on the results with the teacher involved. This had a positive effect of the member of staff also, as she declared that she would use this strategy in future as well and try to defuse the situation before it escalates. This is the last time I have had to speak to this student about her behaviour and attitude in lessons, where as I had spoken to her a few times in the past.

With this small success under my belt I set about devising a strategy for the class that was causing problems on a regular basis (mentioned above). Some of the disruption was low level – talking when they should be listening, not having the correct equipment etc. However there was an element of defiance by some – refusing to hang coats up, to sit where asked, and at times some individuals were very confrontational. Four students seemed to be the main focus for the constant disruption but others joined in. Another of these students was the girl I had spoken to in the situation above and whose behaviour had now improved in both subject areas with two different teachers.

The other three girls I spoke to individually with varying degrees of success. One of these students was already on a behaviour contract with the teacher, myself, Head of Year and parent. They all responded positively to my discussions with them. Upon returning to the class the behaviour of two of the girls improved but the one on the contract was extremely confrontational back in the classroom – so there is still some work to be done here.

I then spoke to the whole class. ‘Did they want to achieve good grades next year in their GCSEs in this subject?’ The reply was ‘Yes’, so I then made some statements that seemed specific but allowed the listeners to fill in their own meaning. I paced my comments to my awareness of the emotional state of the class.

The statements included things like ‘It’s interesting learning about how babies develop,

isn’t it?’ and ‘What you learn will be very useful later in life as well, won’t it?’, ‘Child development can also lead you into lots of different careers, can’t it?’ I then went on to discuss how they could best ensure they achieved those good results and what responsibility they had in developing and maintaining a good working environment within the classroom. All of the time I was asking them for their input and what were they personally going to do to contribute to this excellent learning environment. I asked them what it would feel and look like when they were all on task and learning and also what it would feel and look like to open that envelope next August and get the result they want in their GCSE. I finished by pointing out what an excellent teacher they had and how she always got excellent results for students who worked with her, and by telling them I would visit them regularly to see how they were getting on.

I did pop in to see the class over the following weeks and there was an improvement in the learning atmosphere of the group. However there is still some work to be done and we will continue to employ these strategies in September both with the group as a whole and with individuals within the group. The teacher involved is also keen to try out these new strategies.

#### Summary of impact

The impact of the knowledge base has been immense. It has changed me as a person. Through the four days’ training I now have a greater understanding of myself and how I work and think. I have realised that I put a lot of pressure on myself and that I have to develop strategies to reduce that pressure.

The impact on the students has been significant – both on individuals and on classes as a whole. When I have applied the Milton model and Yes sets the vast majority of students have become much more motivated, attitudes have changes and engagement with the subject has increased. When I say attitudes have changed I mean not only within the learning environment but also within the way students speak to each other and to staff.

Additionally, the fact that there were two people from my school meant that my colleague

“After learning all about influential language patterns on the Leading Thinking course, I decided to have a go at using the ‘Yes set’ language pattern within my class.”

and I could set up a co-coaching scenario. We supported each other, shared ideas and progress as we went along and found that we both benefited from this immensely.

The fact that we have been able to have these opportunities to share learning and expertise has meant that we have all influenced each other. The opportunity to learn about other individuals’ experiences has been invaluable and there are aspects of the work discussed that I will try out in my teaching and dealings with others; and I’m sure there will be aspects of my experiences that others will try out.

In addition, John set aside a time to come into school to coach me on any aspect of NLP I wished. This was invaluable, as I had just been promoted and it gave me the chance to discuss the possibilities of my new role and how to apply my new skills in dealings or discussions with members of my department.

I have evaluated the impact on myself through self-reflection and discussion with the group, co-coach and coach. I have learnt an enormous amount in a very short space of time through using NLP strategies, both about myself personally and the language patterns I use, and how I can incorporate these to impact not only on my teaching but also on the state of students’ willingness and ability to learn in other areas of the department. The evidence I have observed suggests that NLP can improve students’ attitudes and behaviour within and outside the classroom in a positive way.

I have developed skills which have enabled me to deal with different situations in a new and innovative way, and in the process have reflected upon and changed my use of language, which has in turn had the desired effects of helping students change their attitude and improving learning. Students are more receptive to instructions and have more confidence on task. This is an ongoing process of which I have just scratched the surface. However with the increased confidence of the positive changes I have encountered, I look forward to exploring NLP further.

Teacher Learning Academy – Stage 1 Awarded.

#### Case Study 24 – Yes, Yes, Yes

Emma Loader teaches at Corbridge First School.

#### Focus

Corbridge First School is a small (150 pupils) Church of England school situated in a village in Northumberland. My focus was both leadership development and the enhancement of my teaching, by using NLP techniques within the classroom. In particular I am interested in the use of different language patterns to enhance pupils’ behaviour, motivation, attitude and hence, results.

#### Areas of NLP evaluated in the action research project

- Milton model language

#### Research Plan

After learning about the concept of using certain language patterns to influence pupil behaviour, attitude and learning within the classroom, I decided to try to adopt one type of language pattern, the ‘Yes’ set, within my everyday teaching, to see if it had any effect.

#### Implementation and summary of impact

After learning all about influential language patterns on the Leading Thinking course, I decided to have a go at using the ‘Yes set’ language pattern within my class. I began by focusing on a particular child (Child A), who had problems concentrating on a task for very long without adult help and would get emotional and grumpy if she found the task hard.

For one week, I used my usual teaching methods so that I had a ‘control’. Child A’s concentration varied from day to day – sometimes only on task for five minutes at a time, but on two days managed to complete the task and stay focused for 15 minutes without adult intervention. On three out of the five days, Child A cried during the task, saying that she ‘couldn’t do it’ even though, when I checked her understanding, she did have a clear idea of what was expected.

During the second week, I implemented the new language pattern and gave Child A

“... I have started using this language pattern in my everyday teaching and am still reaping the benefits today.”

three facts (for example: 'You have a pen, you have your book, you have space to work' and then I would add a final command such as 'And now you are going to get on without my help until you have finished the work'. I noticed that although the time that Child A sat and concentrated did not really improve, the standard of her work did. Child A had problems with handwriting prior to me using the language pattern, and this was much neater. Also, the quantity of work that she produced was greater than when my existing teaching method was used.

I decided to try this influential language with the whole class. Therefore, before I sent the children off to do their work, I would administer a 'Yes set' first. I noticed that the children were far more focused, the volume in the class was lower and the work they produced of a better quality. The class also seemed calmer and more certain of what was expected of them. As a result, I have started using this language pattern in my everyday teaching and am still reaping the benefits today.

Teacher Learning Academy – Stage 1 Awarded.

## References

**Where publications have been counted towards the table of education-related evidence and perspectives in the literature review (see the visual map on pages 14 and 15) this is indicated with an asterisk\*.**

\*Allbright, J. (1983) *Neuro-linguistic programming in elementary classrooms*. MA in Teaching Thesis, Colorado College.

Allgood, J. (1997) Self directed learning and Neuro Linguistic Programming, in R. Blunden (ed), *Teaching and learning in vocational education and training*, Wentworth Falls NSW: Social Science Press, pp 216–228.

Altmann, G.T.M. (2004) Language-mediated eye movements in the absence of a visual world: the 'blank screen paradigm', *Cognition*, 93: B79–B87.

Altmann, G.T.M. and Kamide, Y. (2004) Now you see it, now you don't: mediating the mapping between language and the visual world, in J. M. Henderson and F. Ferreira (eds), *The interface of language, vision, and action: eye movements and the visual world*, New York: Psychology Press.

Anderson, J. (1981) *Thinking, changing, rearranging: improving self-esteem in young people*, Portland, Oregon: Metamorphous Press.

Anderson, M. and Gordon, D. (1981) *Phoenix: the therapeutic patterns of Milton H. Erickson, M.D.*, Cupertino, California: Meta Publications.

Atkinson, D. (2004) Theorising how student teachers form their identities in initial teacher education, *British Education Research Journal*, 30: 3: 379–394.

Bandler, R. (1985a) *Magic in action*, Cupertino, California: Meta Publications.

Bandler, R. (1985b) *Using your brain – for a change: Neuro-Linguistic Programming*, Moab, Utah: Real People Press.

Bandler, R. and Grinder, J. (1975a) *The structure of magic: a book about language and therapy, vol. 1*, Palo Alto, California: Science and Behaviour Books.

Bandler, R. and Grinder, J. (1975b) *Patterns of the hypnotic techniques of Milton Erickson*, M.D. vol. 1, California: Meta Publications.

Bandler, R. and Grinder, J. (1979) *Frogs into princes*, Moab, Utah: Real People Press.

Bandler, R. and Grinder, J. (1982) *Reframing: Neuro-Linguistic Programming and the transformation of meaning*, Moab, Utah: Real People Press.

Bateson, G. (1972) *Steps to an ecology of Mind*, London: Paladin, Granada.

Bateson, G. (1979) *Mind and nature: a necessary unity*, New York: E.P. Dutton.

Battino, R. and South, T.L. (1999) *Ericksonian approaches: a comprehensive manual*, Camarthen: Crown House.

Bandler, R., Grinder, J. and Satir, V. (1976) *Changing with families*, Palo Alto, California: Science and Behavior Books.

Beadle, P. (2008) Who is the fakest of them all? *Education Guardian*, 26 February.

Beaver, D. (2002) *NLP for lazy learning: how to learn faster and more effectively*. London: Vega.

Beere, J. (2007) *The learner's toolkit, supporting the SEAL framework for secondary schools*, Camarthen: Crown House Publishing.

Beere, J. (2008a) *The learner's toolkit student workbook 1: the habits of emotional intelligence*, Camarthen: Crown House Publishing.

Beere, J. (2008b) *The learner's toolkit student workbook 2: lessons in learning to learn, values for success in life*, Camarthen: Crown House Publishing.

Beck, C.E. and Beck, E.A. (1984) Test of the eye movement hypothesis of Neurolinguistic Programming: a rebuttal of conclusions, *Perceptual and Motor Skills*, 58: 1: 175–176.

\*Beeden, S. (2009) Applying Dilts' 'Disney creativity strategy' within the Higher Education arts, design and media

- environment, in P. Tosey (ed.), *Current research in NLP; Volume 1, proceedings of the first international NLP research conference, University of Surrey, 5 July 2008*. ANLP International CIC. South Mimms, Hertfordshire, UK.
- \*Beaver, R. (1989) Neuro-Linguistic programme as practised by an educational psychologist, *Association of Educational Psychologists Journal*, 5: 2: 87–90.
- \*Ben-Avie, M., Haynes, N.M., White, J., Ensign, J., Steinfeld, T.R., Sartin, L.D. and Squires, D.A. (2003) Youth development and student learning in Math and Science, in N.M. Haynes, M. Ben-Avie and J. Ensign (eds), *How social and emotional development adds up: getting results in maths and science education*, New York: Teachers College Press.
- Best and Thomas (2007) *The creative teaching and learning toolkit*, London: Continuum.
- Blackerby, D.A. (1996) *Rediscover the joy of learning: with Blackerby's academic success skills tips*, Oklahoma City, Oklahoma: Success Skills Inc.
- Blakemore, S-J. and Frith, U. (2005) *The learning brain*, Oxford: Blackwell.
- Blakemore, S-J., Winston, J. and Frith, U. (2004) Social cognitive neuroscience: where are we heading? *Trends in Cognitive Sciences*, 8: 5: 216–222.
- \*Bolstad, R. and Hamblett, M. (1998) Revealing state secrets to teachers, *NLP World*, 5: 3: 5–7.
- Bostic St. Clair, C. and Grinder, J. (2001) *Whispering in the wind*, Scotts Valley, California: J and C Enterprises.
- \*Brandis, A.D. (1987) A neurolinguistic treatment for reducing parental anger responses and creating more resourceful behavioral options, California School of Professional Psychology, Los Angeles, Dissertation Abstracts International. Vol 47(11-B), 4642-B May 1987.
- \*Bradley, G.M. (1986) *The effectiveness of a Neurolinguistic Programming treatment for students test anxiety*, Melbourne: La Trobe University.
- Breedlove, S.M., Rosenzweig, M.R. and Watson, N.V. (2005) (Fifth edition) *Biological psychology*, Sunderland, Massachusetts: Sinauer Associates.
- Bretto Milliner, C. (1985) *Metaphor: the art of purposeful storytelling*, Santa Cruz, California: The Center for Professional Development.
- \*Brien, M.B. (1986) *Neurolinguistic Programming (NLP) and performance in academic/ occupational tasks*, University of Queensland, Brisbane.
- Brophy, J. (1981) Teacher Praise: A Functional Analysis, *Review of Educational Research*, Spring, 5–32.
- Brophy, J.E. and Good, T.L. (1986) Teacher behaviour and student achievement, in M.C. Wittock (ed), *Handbook of research on teaching*, New York: Macmillan, 328–375.
- \*Brown, N. (2002) Meta programme patterns in accounting educators at a UK business school, *Accounting Education*, 11: 79–91.
- \*Brown, N. (2003) A comparison of the dominant meta programme patterns in accounting undergraduate students and accounting lecturers at a UK business school, *Accounting Education*, 12: 159–175.
- \*Brown, N. (2004) What makes a good educator? The relevance of meta programmes, *Assessment and Evaluation in Higher Education*, 29: 5: 515–533.
- \*Brown, N. and Graff, M. (2004) Student performance in business and accounting subjects as measured by assessment results: an exploration of the relevance of personality traits, identified using meta programmes, *International Journal of Management Education*, 4: 3–18.
- Brown, R.J. and Oakley, D.A. (2004) An integrative cognitive theory of hypnosis and high hypnotisability, in M. Heap, R.J. Brown and D.A. Oakley (eds), *The highly hypnotizable person: theoretical, experimental and clinical issues*, London: Routledge.
- \*Brunner, L.M. (1993) *An exploratory study of Neuro Linguistic Programming and communication anxiety*, Masters Thesis, Naval post-Graduate College, Monterey, California.
- \*Bull, L. (2007) Sunflower therapy for children with specific learning difficulties (dyslexia): a randomised, controlled trial, *Complementary therapies in clinical practice*, 13: 1: 15–24.
- \*Burton, D. (2007) Psycho-pedagogy and personalised learning, *Journal of Education for Teaching International Research and Pedagogy*, 33: 13–17.
- \*Burton, G. (1986) Using Neurolinguistic Programming: some suggestions for the remedial teacher, *Focus on Learning Problems in Mathematics*, 8: 41–49.
- \*Burton, R.L. (2004) Learning Styles and Neuro-Linguistic Programming Representational Systems in Nurse Education. Unpublished Dissertation for Ed.D University of Huddersfield.
- Bushwell, D. (2006) *Performance strategies for musicians: how to overcome stage fright and performance anxiety and perform at your peak using NLP and visualisation. A self help handbook for anyone who performs – musicians, singers, actors, dancers, athletes*, London: MX Publishing.
- Cameron-Bandler, L. (1978) *They lived happily ever after: a book about achieving happy endings in coupling*. Cupertino, California, Meta Publications.
- Cameron-Bandler, L. (1984) *Know how: guided programmes for inventing your own best future*, San Rafael, California: FuturePace Inc.
- Cameron-Bandler, L. (1985) *Solutions*, San Rafael, California: FuturePace Inc.
- Cameron-Bandler, L. and LeBeau, M. (1986) *The Emotional Hostage: rescuing your emotional life*. Moab, Utah: Real People Press.
- Cameron-Bandler, L., Gordon, D. and LeBeau, M. (1985) *The imprint method: a guide to reproducing competence*, San Rafael, California: FuturePace Inc.
- Carr, W. and Kemmis, S. (1986) *Becoming critical: education, knowledge and action research*, Lewes: Falmer.
- \*Cassiere, M.F. and And, O. (1987) *Gender differences in the primary representational system according to Neurolinguistic Programming*, paper presented at the Annual Convention of the Southwestern Psychological Association, 33rd, New Orleans, LA, April 16–18.
- Cdaqprofile (2007) *Cdaq technical manual*, Leeds: Cdaqprofile Limited.
- \*Childers, J.H. (1985) Neuro-Linguistic Programming: enhancing teacher-student communications, *Journal of Humanistic Counseling, Education and Development*, 24: 1: 32–39.
- \*Childers, J.H. (1989) Looking at yourself through loving eyes, *Elementary School Guidance and Counseling*, 23: 3: 204–209.
- Churches, R. (2009a) *Effective classroom communication pocketbook*, Alresford, Hampshire: Teachers Pocketbooks.
- Churches, R. (2009b) *Look into my 'i's: a conversation about leadership as hypnosis*, Society for Organisational Learning in the UK seminar, University of Surrey School of Management, 19 March, available from the SOL-UK website.
- \*Churches, R., Hutchinson, G. and Jones, J. (2009) Fast Track teaching: beginning the experiment in accelerated leadership development, *School Leadership and Management*, 29: 3: 277–293.
- Churches, R. and Terry, R. (2007) *NLP for teachers: how to be a highly effective teacher*, Camarthen: Crown House.
- Churches, R. and Terry, R. (2008) Hypnotise your class, *Times Educational Supplement Magazine*, 11 January, 26–29. Available online [http://www.tes.co.uk/search/story/?story\\_id=2564404](http://www.tes.co.uk/search/story/?story_id=2564404) [Accessed 1 July 2008]
- \*Churches, R. and West-Burnham (2008) *Leading learning through relationships: the implications of Neuro-Linguistic Programming for personalisation and the Children's Agenda in England*, Reading: CfBT Education Trust.
- \*Churches, R. and West-Burnham, J. (2009) *Leading learning through relationships: the implications of Neuro-Linguistic Programming for personalisation and the Children's Agenda in England*, in P. Tosey, (ed.), *Current research in NLP, vol 1:*



- proceedings of the first international NLP research conference, University of Surrey, 5 July 2008, South Mimms, Hertfordshire: ANLP International CIC, pp.126–136.*
- \*Clabby, J. and O'Connor, R. (2004) Teaching learners to use mirroring: rapport lessons from NeuroLinguistic Programming, *Family Medicine*, 36: 8: 541–3.
- Claxton, G. (2002) *Building learning power*, Bristol: TLO Limited.
- \*Cleaver, D. (1997) *Alleviating musical performance anxiety using Neuro-Linguistic Programming based techniques: an investigation into the application and monitoring of a teacher-based management program for students suffering with musical performance anxiety*, Unpublished BME (Hons) Thesis, University of Sydney, Sydney Conservatorium of Music.
- Cleveland, B.F. (1984) *Master teaching techniques: Neuro Linguistic Programming*, Portland, Oregon: Metamorphous Press.
- Coffield, F., Moseley, D., Hall, E. and Ecclestone, K. (2004a) *Learning styles and pedagogy in post 16 learning: a systematic and critical review*, London: Learning and Skills Research Centre, Institute of Education.
- Coffield, F., Moseley, D., Hall, E. and Ecclestone, K. (2004b) *Should we be using learning styles? What research has to say to practice*, London: Learning and Skills Research.
- \*Crawford, K. N. (1991) *Adapting teacher communication to student learning styles*, Masters Thesis, University of Dayton.
- \*Craft, A. (2001) Neuro-Linguistic Programming and learning theory, *Curriculum Journal*, 12: 125–136.
- \*Currier, S.M. (1993) *Creating choices in education with Neuro-Linguistic Programming a graduate project*, MEd Thesis, Keene State College.
- \*Dailey, A.L. (1989) Neuro Linguistic Programming in peer counselor education, *Journal of College Student Development*, 30: 2: 173–175.
- Dapretto, M., Davies, M.S., Pfeifer, J.H., Scott, A.A., Sigman, M., Bookheimer, S.Y. and Iacoboni, M. (2006) Understanding emotions in others: mirror neuron dysfunction in children with autism spectrum disorders, *Nature Neuroscience*, 9: 1: 28–30.
- Davis, J. (1988) *On matching teaching approach with student learning style: are we asking the right question*, Memphis, Tennessee: University of Memphis.
- \*Day, R.C.G. (1985) *Students' perceptions of neuro-linguistic programming strategies*, PhD Thesis, Florida State University.
- \*Day, T. (2005) NLP modelling in the classroom: students modelling the good practice of other students, paper presented at the British Educational Research Association New Researchers/ Student Conference, University of Glamorgan, 14th September 2005.
- \*Day, T. (2008) *A study of a small-scale classroom intervention that uses an adapted Neuro-Linguistic Programming modelling approach*, PhD Thesis, University of Bath.
- \*De Luyne, L. (1995) Neuro Linguistic Programming, *Educational and Child Psychology*, 12: 34–47.
- \*De Mirandi, C.T., de Paula, C.S., Palma, D., da Silva, E.M., Martin, D. and de Nobrega, F.J. (1999) *Impact of the application of neurolinguistic programming to mothers of children enrolled in a day care center of a shantytown*, Sao Paulo Medical Journal, 4: 117(2): 63–71.
- De Porter, B., Reardon, M. and Singer-Nourie, S. (1999) *Quantum teaching: orchestrating student success*, New York: Delta.
- \*Denney, R.W. (1996) *A review of literature and application of neurolinguistic programming to the treatment of stress in educators*, MA Thesis, University of Texas of the Permian Basin.
- Desforges, C., Morris, A. and Stanton, G. (2005) *Modelling D and R Programmes: Report of a workshop for interested parties*, London: National Education Research Forum, Working Paper 5.3.
- DeSouza, J.F.X., Dukelow, S.P., Gati, J.S., Menon, R.S., Andersen, R.A. and Vilis, T. (2000) Eye position signal modulates a human parietal pointing region during memory-guided movements, *Journal of Neuroscience*, 20: 15: 5835–5840.
- Department for Children, Schools and Families (2006) *School workforce in England*, DCSF, national statistics, D3, London: DCSF.
- DfES (2004) *National standards for headteachers*, London: DfES.
- Diamantopoulos, G., Woolley, S.I. and Spann, M. (2009) A critical review of past research into the neuro-linguistic programming eye-accessing cues model, in P. Tosey, P. (ed.), *Current research in NLP, vol 1: proceedings of the first international NLP research conference, University of Surrey, 5 July 2008, South Mimms, Hertfordshire: ANLP International CIC, pp.126–136.*
- Dilts, R.B. (1983a) *Application of Neuro-Linguistic programme: a practical guide to communication, learning and change*, Cupertino, California: Meta Publications.
- Dilts, R.B. (1983b) Application of NLP in education (1981), in R. Dilts, *Applications of Neuro-Linguistic Programming*. Cupertino, California: Meta Publications, pp. 1–39.
- Dilts, R.B. (1983c) *Roots of Neuro-Linguistic Programming: a reference guide to the technology of NLP*, Cupertino: California: Meta Publications.
- Dilts, R.B. (1998) *Modelling with NLP*, Capitola, California: Meta Publications.
- Dilts, R.B. (1999) *Sleight of mouth: the magic of conversational belief change*, Capitola, California: Meta Publications.
- Dilts, R.B. and Epstein, T.A. (1995) *Dynamic learning*, Capitola, California: Meta Publications.
- Dilts, R.B., Bandler, R. and DeLozier, J. (1980) *Neuro-Linguistic Programming: volume 1, the study of the structure of subjective experience*, Capitola, California: Meta Publications.
- Dilts, R.B., Grinder, J., Bandler, R., DeLozier, J. and Cameron-Bandler, L. (1979) *Neuro-Linguistic Programming, vol.1*, Cupertino, California: Meta Publications.
- Dobbin, A., Faulkner, S., Heaney, D., Sivasubrahmaniam, S. and Gruzeliar, J. (2004) Impact on health status of a hypnosis clinic in general practice, *Contemporary Hypnosis*, 21: 4: 153–160.
- \*Dolnick, K. (2006) *Neuro-Linguistic applications to classroom management: reach them to teach them*, PhD Thesis, Capella University.
- \*Dowlen, A. (1996) NLP – help or hype? Investigating the uses of Neuro-Linguistic Programming in management learning, *Career Development International*, 1: 27–34.
- \*Dragovic, T. (2007) *Teachers' professional identity and the role of CPD in its creation – a report on a study into how NLP and non-NLP trained teachers in Slovenia talk about their professional identity and their work*, International Society for Teacher Education, 27th Annual International Seminar at University of Stirling, Scotland, 24–30 June 2007.
- Earley, P. and Bubb, S. (2004) *Leading and managing continuing professional development*, Paul Chapman Publishing.
- \*Eckstein, D. (2004) Reframing as an innovative educational technique: turning a perceived inability into an asset, *Korean Journal of Thinking and Problem Solving*, 14: 1: 37–47.
- Einspruch, E.L. and Forman, B.D. (1985) Observations concerning research literature on Neuro-Linguistic Programming, *Journal of Counseling Psychology*, 32: 4: 589–596.
- Ekman, P. (2003) *Emotions revealed*, London: Phoenix.
- Elgin, S.H. (1980) *The gentle art of verbal self-defense*, New York: Dorset Press.
- Elgin, S.H. (1983) *More on the gentle art of verbal self-defense*, Englewood Cliffs, New Jersey: Prentice-Hall.
- Elliott, J. (1981) *Action research: a framework for self-evaluation in schools*, Cambridge: Cambridge Institute of Education.
- Elston, T. and Spohrer, K.E. (2009 in press) *Using NLP to enhance behaviour and learning: a handbook for teachers*, London: Continuum.
- Elton, L. (Ed.) (1996) *Criteria for teaching competence and teaching excellence in higher education*, London: The Falmer Press.
- \*Esterbrook, R.L. (2006) Introducing Russian Neuro-Linguistic Programming behavior modification techniques to enhance learning and coping skills for high-risk

- students in community colleges: an initial investigation, Doctoral Dissertation, George Mason University, Fairfax VA.
- Fisher, S., Parkinson, R. (2004 and 2007) *British Psychological Society testing centre test review – Cdaq*, British Psychological Society.
- Freeth, P. (2003) *NLP – skills for learning: a practical handbook for increasing learning potential*, Kenilworth, Warwickshire: Communication in Action.
- \*Fremder, L.A. (1986) *Generalization of visual dot pattern strategies to number pattern strategies by learning disabled students*, Dissertation Abstracts International 47(11), 4055-A Columbia University Teachers College.
- Frost, D. and Durrant, J. (2003) *Teacher-led Development Work*. London: David Fulton.
- \*Fruchter, H.J. (1983) *Sensory reinforcement in the service of aggression maintenance in children: a treatment study*, Dissertation Abstracts International 45(3) 1013-B Syracuse University.
- Fullan, M. (2001) *Leading in a culture of change*, San Francisco: Jossey-Bass.
- Fullan, M. (2003) *The moral imperative of school leadership*, Thousand Oaks, CA: Corwin Press.
- Fullan, M. (2005a) The Tri-Level Solution, *Education Analyst*, Society for the Advancement of Excellence in Education, Winter 2005, pp.4–5
- Fullan, M. (2005b) *Leadership and sustainability*, Corwin Press, California.
- Fullan, M. (2007) *Leading in a system of change*, paper prepared for Conference on Systems Thinking and Sustainable School Development, Utrecht, February, OISE/ University of Toronto.
- Gagne, R.M., Yekovick, C.W. and Yekovick, F.R. (1993) *The cognitive psychology of school learning*, New York: HarperCollins.
- Geake, J. and Cooper, P. (2003) *Cognitive Neuroscience: implications for education? Westminster Studies in Education*, 26: 1, June 2003. UK: Carfax Publishing, Taylor and Francis.
- Geake, J. (2005) Educational neuroscience and neuroscientific education: in search of a mutual middle-way, *Researchintelligence: News from the British Educational Research Association*, August 2005, Issue 92. UK: British Educational Research Association.
- Geake, J. (2008) Neuromythologies in education. *Educational Research*, 50: 2:123–133.
- \*Ghaoui, C. and Janvier, W.A. (2009) Interactive e-learning, *International Journal of Distance Education Technologies*, 2: 3: 2: 26–35.
- Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P. and Trow, M. (1994) *The new production of knowledge*, London: Sage.
- Gibson, R. (1985) Critical times for action research, *Cambridge Journal of Education*, 15: 1: 59–64.
- Ginnis, P. (2002) *Teacher's toolkit: raise classroom achievement with strategies for every learner*. Camarthen: Crown House.
- \*Girija Navaneethan, C. and Saraladevi Devi, K. (2009) *Influence of learning techniques on information processing*, US-China Education Review, 6: 1 (Serial No.50): 1–32.
- Goodall, J., Day, C., Lindsay, G., Muijs, D. and Harris, A. (2005) *Evaluating the Impact of Continuing Professional Development (CPD)*, London: Department for Education and Skills.
- Gordon, C-M. and Gruzelier, J. (2006) Self-hypnosis and osteopathic soft tissue manipulation of a ballet dancer, *Contemporary Hypnosis*, 20: 4: 209–214.
- Gordon, D. (1978) *Therapeutic metaphors*, Cupertino, California: Meta Publications.
- Grinder, J. and Bandler, R. (1976) *The structure of magic II: a book about communication and change*, Palo Alto, California: Science and Behavior Books.
- Grinder, J. and Bandler, R. (1981) *Trance-formations: Neuro-Linguistic Programming and the structure of hypnosis*, Moab, Utah: Real People Press.
- Grinder, J., Delozier, J. and Bandler, R. (1975) *Patterns of the hypnotic techniques of Milton Erickson, M.D. vol. 2*, California: Meta Publications.

- Grinder, M. (1991) *Righting the educational conveyor belt (red seal educational series)*, Portland, Oregon: Metamorphous Press.
- Grinder, M. (1993) *Envoy: your personal guide to classroom management*, Battle Ground, WA: Michael Grinder Associates.
- Grinder, M. (1996) *A healthy classroom*, Battle Ground, WA: Michael Grinder Associates.
- GTCE (2008a) *Introducing the Teacher Learning Academy: Helping teachers make small changes that have a big impact in the classroom*, General Teaching Council for England.
- GTCE (2008b) *Teacher Learning Academy: TLA briefing booklet*, General Teaching Council for England.
- Guay, F., Marsh, H.W. and Bovin, M. (2003) Academic self-concept and academic achievement: developmental perspectives on their causal ordering, *Journal of Educational Psychology*, 95; 1: 124–136.
- Gudmundsdottir, S. (1990) Values in pedagogical content knowledge, *Journal of Teacher Education*, 41: 3: 44–52.
- Gunn, S.L. (1981) *Leisure counselling using NLP*, Stillwater, Oklahoma: International Society of Leisure Therapies.
- Guskey, T.R. (1994) *Professional development in education. In search of the optimal mix*. Annual Meeting of the American Educational Research Association, New Orleans.
- Guskey, T.R. (2000) *Evaluating professional development*. Thousand Oaks, CA, Corwin Press.
- Goodall, J., Day, C., Lindsay, G., Muijs, D. and Harris, A. (2005) *Evaluating the Impact of Continuing Professional Development (CPD)*, London: Department for Education and Skills.
- Gow, K., Reupert, A. and Maybery, D. (2006) NLP in action: theory and techniques in teaching and learning, in S.N.Hogan, *Trends in learning research*, pp.99–118.
- Hafting, T., Fyh, M., Molden, S., Moser, M-B. and Moser, E.I. (2005) Microstructure of a spatial map in the Entorhinal Cortex, *Nature*, 436: 801–806
- Hager, M. (1989) Learning verb tenses with the help of Neuro-Linguistic Programming, *Praxis des neu sprachlichen Unterrichts*, 36: 4: 404–405.
- Hager, M. (1990) Using Neuro-Linguistic Programming to learn vocabulary, *Praxis des neu sprachlichen Unterrichts*, 37: 1: 59–61.
- Hager, M. (1992) Timeline and other elements of Neuro-Linguistic Programming in the language classroom, *Praxis des neu sprachlichen Unterrichts*, 39: 2: 138–139.
- Hall, L.M. (2005) *The Sourcebook of Magic*, Camarthen: Crown House.
- \*Hall, E., Wall, K., Higgins, S., Stephen, L., Pooley, I. and Welham, J. (2005) Learning to learn with parents: lessons from two research projects, *Improving Schools*, 8: 179–191.
- Hämäläinen, R.P. and Saarinen, E. (eds) (2004) *System intelligence: discovering a hidden competence in human action and organizational life*, Helsinki University of Technology, Systems Analysis Research Reports, A88, pp.257–273.
- Hammond, D.C. (1990) *Handbook of hypnotic suggestions and metaphors*, New York: W.W. Norton and Company.
- Hampden-Turner, C. (1981) The linguistics of therapy: Noam Chomsky, Richard Bandler and John Grinder, in C.Hampden-Turner, *Maps of the Mind*, New York: Ollier Books.
- Hargreaves, A. (1994) *Changing Teachers: Changing Times*, London: Cassell.
- Hargreaves, D. (Chair) (2005) *About learning: report of the learning working group*, London: Demos.
- Hargreaves, A., Halász, G. and Pont, B. (eds) (2008) The Finnish approach to system leadership, in B. Pont, D. Nusche and D. Hopkins, *Improving school leadership, volume 2: case studies in system leadership*, Organisation for Economic Co-operation and Development, pp.69–110.
- Harper, L. (1982) *Classroom magic – effective teaching made easy*, Troy, Michigan: Twigg's Communication. Revised and republished as Lloyd, L. (1989) *Classroom magic: amazing technology for teachers and homeschoolers*, Portland, Oregon: Metamorphous Press.



- Harris, A. and Muijs, D. (2004) *Improving schools through teacher leadership*, Oxford: Oxford University Press.
- Harris, M.J. and Rosenthal, R. (1985) Mediation of interpersonal expectancy effects: 31 meta-analyses, *Psychological Bulletin*, 97: 363–386.
- \*Harris, T. (2001) NLP if it works use it..., *CAUCE, Revista de Filología y su Didáctica*, 24: 29–38.
- Heap, M. (1988) Neurolinguistic Programming – an interim verdict, in M. Heap (ed), *Hypnosis: current clinical, experimental and forensic practices*, London: Croom Helm, pp. 268–280.
- Heap, M. (2008) The validity of some early claims of neuro-linguistic programming, *Skeptical Intelligencer*, 11: 6–13.
- Heap, M. and Kottiyattil, K. (2002) *Hartland's medical and dental hypnosis*, Edinburgh: Churchill Livingstone.
- \*Helm, D.J. (1989) Education: the wagon train to the stars/it's time to 'jump start learning through NLP', *Education*, 110: 2: 54–256.
- \*Helm, D.J. (1990) Neurolinguistic Programming: equality as to distribution of learning modalities, *Journal of Instructional Psychology*, 17: 3: 159–160.
- \*Helm, D.J. (1991) Neurolinguistic Programming: gender and the learning modalities create inequalities in learning: a proposal to reestablish equality and promote new levels of achievement in education, *Journal of Instructional Psychology*, 18: 3: 167–169.
- \*Helm, D.J. (1994) Neuro-Linguistic Programming: establishing rapport between school administrators and the students, staff and community, *Education*, 114: 4: 625–627.
- \*Helm, D.J. (2000) Neuro-Linguistic Programming: enhancing learning for the visually impaired, *Education*, 120: 5: 790–794.
- \*Helm, D.J. (2009) Improving English instruction through Neuro-linguistic programming, *Education*, 130: 1: 110–113.
- Hickmott, O. and Bendefy, A. (2006) *Seeing spells achieving: improve your spelling, reading, memory, dyslexic symptoms, in any language, by using your brain the way the nature intended, through NLP and visualisation*, London: MX Publishing.
- Higgins, S., Wall, K., Hall, E., Baumfield, V., Leat, D., Moseley, D. and Woolner, P. (2007) *Learning to learn in schools: phase 3, final report*, Campaign for Learning, University of Durham, University of Newcastle and the Institute of Education, London University.
- \*Hillin, H.H. (1982) Effects of a rapport method and chemical dependency workshop for adults employed in Kansas service agencies, *Dissertation Abstracts International* 44(12), 3574-A, Kansas State University.
- \*Hishmeh, A.L. (2005) *Neurolinguistic programming as observational and mediational strategies in teaching primary-level English as a second language*, MA Thesis, San Bernardino: California State University.
- Hodgson, D. (2009) *The little book of inspirational teaching activities*, Camarthen: Crown House.
- Hopkins, D. (2009) *The emergence of system leadership*, Nottingham: National College for School Leadership.
- Hopkins, D. and Harris, A. (2001) *Creating the conditions for teaching and learning: a handbook of staff development activities*, London: David Fulton Press.
- Hopkins, D. and Higham, R. (2007) System leadership: mapping the landscape, *School Leadership and Management*, 27: 2: 147–166.
- \*Hutchinson, G., Churches, R. and Vitae, D. (2006) *The consultant leader programme in London's PRUs and EBD schools; impact report 3: towards system leadership*, Reading: CfBT Education Trust and the National College for School Leadership.
- \*Hutchinson, G., Churches, R. and Vitae, D. (2007) *NCSL London Leadership Strategy, consultant leaders to support leadership capacity in London's PRUs and EBD Schools: impact report: roll-out, July 2007*, Reading: CfBT Education Trust and the National College for School Leadership.
- \*Hutchinson, G., Churches, R. and Vitae, D. (2008) *Together we have made a difference: consultant leaders to support leadership capacity in London's PRUs and EBD schools, final programme report*, Reading: CfBT Education Trust and the National College for School Leadership.
- Institute for the Future of the Mind (2007) *Brain-science in the classroom: transcript of the keynote seminar of the all-party working group on scientific research in learning and education*, Portcullis House, Houses of Parliament, Tuesday 15 May, Oxford: Institute for the Future of the Mind. Available at <http://www.futuremind.ox.ac.uk>, accessed 24 July 2009.
- Jacobson, S. (1983) *Meta-Cation: prescriptions for some ailing education processes*, Cupertino, California: Meta Publications.
- Jacobson, S. (1986a) *Meta-Cation, volume II: new improved formulas for thinking about thinking*, Cupertino, California: Meta Publications.
- Jacobson, S. (1986b) *Meta-Cation, volume III: powerful applications for strong relief*, Cupertino, California: Meta Publications.
- Jensen, E. (1995) *Super teaching: over 1000 practical strategies*, San Diego, California: Jensen Learning.
- \*Johnson, S. (2004) 'Strategies for success': integrating Neuro Linguistic Programming into the undergraduate curriculum, paper presented at The 12th Improving Student Learning Symposium, Oxford Centre for Staff and Learning Development, Oxford Brookes University, Birmingham, 6–8 September.
- Johnson, M. and Lakoff, G. (1980) *Metaphors we live by*, London: University of Chicago Press.
- \*Jones, J. and Attfield, R. (2007) *Flying high: some leadership lessons from the Fast Track teaching programme*, Reading: CfBT Education Trust. Unpublished.
- Kalisch, R., Wiech, K., Critchley, H.D., Seymour, B., O'Doherty, J.P., Oakley, D.A., Allen, P. and Dolan, R.J. (2005) Anxiety reduction through detachment: subjective, physiological, and neural effects, *Journal of Cognitive Neuroscience*, 17: 6: 874–883.
- Kaplan, O. (2007) The effect of the hypnotic-suggestive communication level of advertisements on their effectiveness, *Contemporary Hypnosis*, 24: 2: 53–63.
- Kayser, C. (2007) Listening with your eyes, *Scientific American Mind*, 18: 2: 24–29.
- Kayser, C., Petkov, M., Augart, N. and Logothetis, N. (2005) Integration of touch and sound in auditory cortex, *Neuron*, 48: 2: 373–384.
- \*Kennedy, C. and And, O. (1994) *Study strategies: a formula for exceptional outcomes in the mainstream*, paper presented at the Annual Convention of the Council for Exceptional Children, 72nd, Denver, CO, April 6–10, 1994.
- King, M., Novik, L. and Citrenbaum, C. (1983) *Irresistible communication: create skills for the health profession*, Philadelphia, PA: W.B. Saunders.
- King, M., Novik, L. and Citrenbaum, C. (1984) *A guide to self-management strategies for nurses*, New York: Springer Publishing.
- Knierim, J.J. (2007) The matrix in your head, *Scientific American Mind*, 18: 3: 42.
- Knight, K. (1990) *Effects of learning style accommodation on achievement of second graders*, paper presented at the meeting of the mid-south educational research association, New Orleans, November 1990.
- \*Knowles, J. (1983) *The old brain, the new mirror: matching teaching and learning styles in foreign language class (based on Neuro-Linguistic Programming)*, Paper presented at the Northeast Conference on the Teaching of Foreign Languages, Baltimore, MD, 28 April – 1 May 1983.
- Korthagen, F.A.J. (2004) In search of the essence of a good teacher, *Teaching and Teacher Education*, 20: 1: 77–97.
- Korzybski (1933/1994) *Science and Sanity: An Introduction to Non-Aristotelian systems and general semantics*, Lakeville, Connecticut: The International Non-Aristotelian Library Publishing Company, Institute of General Semantics.
- Kraemer, D.J., Rosenberg, L.M. and Thompson-Schill, S.L. (2009) The neural correlates of visual and verbal cognitive styles, *Journal of Neuroscience*, 29: 3792–3798.



- Laborde, G.Z. (1985) *90 days to communication excellence*, Palo Alto: California, Syntony Publishing.
- Laborde, G.Z. (1983) *Influencing with integrity*, Palo Alto, California: Syntony Inc. Publishing Co.
- Laeng, B. and Teodorescu, D.S. (2002) Eye scanpaths during visual imagery reenact those of perception of the same visual scene, *Cognitive Science*, 26: 207–231.
- Lankton, S.R. (1979) *Practical magic: the clinical applications of Neuro-Linguistic Programming*, Cupertino, California: Meta Publications.
- Lankton, S. (2008) An Ericksonian approach to clinical hypnosis, in M.R. Nash and A.J. Barnier (eds), *The Oxford handbook of hypnosis: theory, research and practice*, Oxford: Oxford University Press, pp.467–485.
- Lazanov, G. (1978) *Suggestology and outlines of Suggestopediy*, New York: Gordon and Breach.
- \*Lee, A. (1993) Outdoor education and Neuro-Linguistic Programming, *Journal of Adventure Education and Outdoor Leadership*, 10: 16–17.
- Leithwood, K., Day, C., Sammons, P., Harris, A. and Hopkins, D. (2006) *Seven strong claims about successful school leadership*, Nottingham: National College for School Leadership.
- Lewis, I. (1987) Encouraging reflexive teacher research, *British Journal of Sociology of Education*, 8: 1: 95–105.
- Lewis, B.A. and Pucelik, R.F. (1982) *Magic demystified: a pragmatic guide to communication and change*, Lake Oswego, Oregon: Metamorphous Press.
- Lieberman, M.D. (2007) Social cognitive neuroscience: a review of core processes, *Annual Review of Psychology*, 58: 259–89.
- Linden, A. and Stass, F. (1985) *A handbook for basic Neuro-Linguistic Programming training*. New York: New York Training Institute for Neuro-Linguistic Programming.
- Lipset, D. (1980) *Gregory Bateson: the legacy of a scientist*, London: Prentice-Hall.
- \*Lisle, A. (2005) *The double loop: reflections on personal development planning and reflective skills of undergraduates*, paper presented at the British Educational Research Association Annual Conference, University of Glamorgan, 14th–17th September 2005.
- \*Lisman, G.J. (1995) *The effect of a neuro-linguistic programming modeled-reading comprehension strategy on special education students*, Masters Thesis, State University of New York College at Brockport.
- Lloyd, L. (1989) *Classroom magic: amazing technology for teachers and homeschoolers*, Portland, Oregon: Metamorphous Press. Revised and republished version of Harper, L. (1982) *Classroom magic – effective teaching made easy*, Troy, Michigan: Twiggs Communication.
- \*Loiselle, F. (1985) *The effect of eye placement on orthographic memorization*, PH.D. Thesis, Faculté des Sciences Sociales, Université de Moncton, New Brunswick, Canada.
- Lord, P., Lamont, E., Harland, J., Mitchell, H. and Straw, S. (2009) *Evaluation of the GTC's Teacher Learning Academy (TLA): Impacts on Teachers, Pupils and Schools*. London: GTC.
- \*Love, M.H. (2001) Neuro-linguistic programming: a basis for language learning, *The Journal of the Imagination in Language Learning and Teaching*, 100–107.
- Lozanov, G. (1978) *Suggestology and outlines of suggestopediy*, London: Gordon and Breach Science.
- Lucas, B. (2001) *Power up your mind: learn faster, work smarter*, London: Nicholas Brealey Publishing.
- Macaluso, E. and Driver, J. (2005) Multisensory spatial interactions: a window into functional integration in the human brain, *Trends in Neurosciences*, 28: 5: 264–271.
- MacGilchrist, B. and Buttress, M. (2005) *Transforming Learning and Teaching*. London: Paul Chapman.
- Mahony, T. (1999) (First edition) *Principled headship: a teacher's guide to the galaxy*, Camarthen: Crown House Publishing.

- Mahony, T. (2002) *Words work! How to change your language to improve behaviour in your classroom*, Camarthen: Crown House Publishing. Republished in 2007 as Mahony, T. (2007) *Making your works work: using NLP to improve communication, language and behaviour*, Camarthen: Crown House Publishing.
- Mahony, T. (2004) (Second Edition) *Principled headship: a teacher's guide to the galaxy*, Camarthen: Crown House Publishing.
- \*Marcello, M. (2003) *Language and identity: learning and the learner*, paper presented at the Tenth International Literacy and Education Research Network Conference on Learning. Institute of Education, University of London 15–18 July 2003.
- \*Malloy, T.E. (1987) Teaching integrated thought. Techniques and data, Paper presented at Annual Meeting of the Conference on College Composition and Communication 12–19 March. Available at ERIC.
- \*Malloy, T.E. (1989) Principles for teaching cognitive strategies, University of Utah, available at [www.kattmodel.se](http://www.kattmodel.se).
- \*Malloy, T.E. (1995) Empirical evaluation of the effectiveness of a visual spelling strategy, in K.H. Schick (ed), *Rechtschreibterapie*, Paderborn, Junfermann Verlag.
- \*Marcus, J. and Choi, T. (1994) Neurolinguistic Programming: magic or myth? *Journal of Accelerative Learning and Teaching*, 19: 3–4: 309–342.
- Marsh, H.W., Hau, K–T. and Kong, C–K. (2002) Multilevel causal ordering of academic self-concept and achievement: influence of language of instruction (English Compared with Chinese) for Hong Kong Students, *American Educational Research Journal*, 39: 3: 727–763.
- Mathes, L. (1982) *Rapport: a workbook*. Vienna, Virginia: NLP of Washington D.C.
- \*Mathison, J. (2004) *The inner life of words: an investigation into language in learning and teaching*, PhD thesis, University of Surrey.
- \*Mathison, J. and Tosey, P. (2008a) Innovations in constructivist research: NLP, psycho-phenomenology and the exploration of inner landscapes, *The Psychotherapist*, 37: 5–8.
- \*Mathison, J. and Tosey, P. (2008b) Exploring inner landscapes: NLP and psycho-phenomenology as innovations in researching first-person experience, *Qualitative Research in Management and Organization Conference*, New Mexico, March 11–13 2008.
- \*Mathison, J. and Tosey, P. (2008c) Riding into transformative learning, *Journal of Consciousness Studies*, 15: 2: 67–88.
- \*McCabe, D. (1985) Meeting language needs of all types of learners, *Academic Therapy*, 20: 5: 563–567.
- McCormick, D. (1987) *Bibliography of Literature on Neuro-Linguistic Programming*, Available on microfiche, ERIC ED294444.
- \*McHugh, J.A. (1986) The effect of eye movements on paired-associate learning: a test of the neurolinguistic programming eye-movement hypothesis, Masters Thesis, California State University.
- McKinnon, K. (2007) *The gift: a 'how to' for NLP with real life experiences*, Glasgow: excelr8.
- McMaster, M.D. and Grinder, J. (1980) *Precision: a new approach to communication (high quality information processing for business)*, Los Angeles, California: Precision.
- McNiff, J. (1988) *Action research: principles and practice*, Basingstoke: Macmillan.
- Meta4education (2006) Imagine: Durham NLP in Education, available at <http://www.meta4education.co.uk/durham.pdf>.
- Miller, R.R. and Matzel, L.D. (2000) Memory involves far more than 'consolidation', *Nature Reviews Neuroscience*: 1: 214–216.
- \*Millrood, R. (2004) The role of NLP in teachers' classroom discourse, *ELT Journal*, 58: 10–37.
- Mills, G. (2003) *Action research: a guide for the teacher researcher* (2nd edition), New Jersey: Merrill/Prentice Hall.
- Muijs, R.D. (1998) The reciprocal relationship between self-concept and school achievement, *British Journal of Educational Psychology*, 67: 3: 263–277.

- Moine, D. and Herd, J.H. (1984) *Modern persuasion strategies: hidden aspects of selling*, Englewood Cliffs, New Jersey: Prentice-Hall.
- Moine, D.J. and Herd, J.H. (1984) *Modern persuasion strategies: the hidden advantage in selling*, Englewood Cliffs, New Jersey: Prentice-Hall.
- Morris, A. (2004) *Modelling D and R Programmes: Initial exploration of features*, London: National Education Research Forum, Working Paper 3.5.
- Morris, A. (2009) (Foreword by Charles Desforges) *Evidence matters: towards informed professionalism in education*, Reading: CfBT Education Trust.
- Mills, G. (2003) *Action research: a guide for the teacher researcher* (2nd edition), New Jersey: Merrill/Prentice Hall.
- Mortimore, P., Sammons, P., Stoll, L., Lewis, D. and Ecob, R. (1988) *School matters*, Westport, Connecticut: Praeger.
- Muijs, R.D. (1998) The reciprocal relationship between self-concept and school achievement, *British Journal of Educational Psychology*, 67: 3: 263–277.
- Muijs, D. and Reynolds, D. (2005, 2nd Edition) *Effective teaching, evidence and practice*, London: Sage.
- \*Munaker, S. (1997) *The great aha! a path to transformation*, PhD Dissertation, Abstracts International Section A: Humanities and Social Sciences. Vol 57 (11-A), May 1997.
- \*Murray, P. and Murray, S. (2007) Promoting sustainability values within career-oriented degree programmes: a case study analysis, *International Journal of Sustainability in Higher Education*, 8: 16–300.
- Neck, C.P. and Manz, C.C. (1992) Thought self-leadership: the influence of self-talk and mental imagery on performance, *Journal of Organizational Behavior*, 13: 7: 681–699.
- \*Nelson, D.K. (1992) *New options to enhance teaching and learning*, Masters Thesis, University of St. Thomas, Saint Paul, Minnesota.
- NERF (2004) *Strategic proposals*, London: National Education Research Forum, Working Paper 3.1.
- \*Nesbitt, K. (1985) Teaching spelling: using an adaptation of a neurolinguistic programming spelling strategy, Masters Thesis, Fresno Pacific College.
- \*Newell, B. (2000) The easy road to learning may be a dead end, *Australasian Science*, 21: 29–31.
- Noffke, S.E. and Somekh, B. (2009) *The SAGE handbook of educational action research*, London: Sage.
- O'Connor, J. (1987) *Not pulling strings: applications of Neuro-Linguistic Programming to teaching and learning music*, New Malden, Surrey: Lambent Books.
- O'Connor, J. (2001) *NLP workbook*, London: HarperCollins.
- O'Connor, J. and Seymour, J. (1990) *Introducing Neuro-Linguistic Programming*, Cornwall: Aquarian Press.
- O'Leary and Craig (2007) *System leadership: lessons from the literature*, Nottingham: National College for School Leadership.
- Otto, G. (2006) Applied kinesiology and legasthenie, *Erfahrungsheilkunde*, 55: 186–191.
- Owen, N. (2001) *The magic of metaphor: 77 stories for teachers, trainers and thinkers*, Camarthen: Crown House.
- Özmen, F. (2009) Sinir dili programlamanin (SDP) egitim yönetimi ve denetiminde (The use of Neuro Linguistic Programming (NLP) in educational management and supervision), *New world sciences academy e-journal, Education, Management and Politics Series*, 2: 2: C0051.
- Pachler, N., Daly, C. and Lambert, D. (2003) Teacher learning: reconceptualising the relationship between theory and practical teaching in masters level course development, *Proceedings: Forum for Quality Assurance in Distance-Learning*, University of London: Institute of Education.
- \*Parfitt, T. (2004) How Beslan's children are learning to cope, *The Lancet*, 364: 9450: 2009–2010.

- \*Parr, G. and And, O. (1986) The effectiveness of Neurolinguistic Programming in a small-group setting, *Journal of College Student Personnel*, 27: 358–361.
- Pascual-Leone, A., Nguyet, D., Cohen, L.G., Brasil-Neto, J.P., Cammarota, A. and Hallett, M. (1995) Modulation of muscle responses evoked by transcranial magnetic stimulation during the acquisition of new fine motor skills, *Journal of Neuroscience*, 74: 3: 1037–1045.
- Patrizi, F.M. (1982) *Self-attitude enhancement through positive mental imagery*, paper presented at the 90th annual convention of the American Psychological Association.
- Pavlov, I. (1927) *Conditioned reflexes*, London: Oxford University Press.
- Pekala, R.J. (1985) A psychophenomenological approach to mapping and diagramming states of consciousness, *Journal of Religion and Psychical Research*, 8: 199–214.
- Pekala, R. J. (1991a) Quantifying consciousness: an empirical approach. New York: Plenum Press.
- Pekala, R.J. and Ersek, B. (1992/93) Firewalking versus hypnosis: a preliminary study concerning consciousness, attention and fire immunity, *Imagination, Cognition and Personality*, 12: 3: 207–229.
- Pekala, R.J. and Kumar, V.K. (2007) An empirical-phenomenological approach to quantifying consciousness and states of consciousness: with particular reference to understanding the nature of hypnosis, in G. A. Jamieson (ed), *Hypnosis and conscious states: the cognitive neuroscience perspective*, pp.167–194, London: Oxford University Press.
- Petitmengin, C. (2006) Describing one's subjective experience in the second person. An interview method for the science of consciousness, *Phenomenology and the cognitive sciences*, 5: 3-4: 229–269(41).
- Piaget, J. (1962) *Play, dreams and imitation in childhood*. London: Routledge.
- Pinker, S. (2002) *The blank slate*, London: The Penguin Press.
- Pont, B., Nusche, D. and Hopkins, D. (2008) *Improving school leadership, volume 2: case studies in system leadership*, Organisation for Economic Co-operation and Development.
- Pont, B., Nusche, D. and Moorman, H. (2008) *Improving School Leadership Volume 1*, Paris: OECD.
- Ponting, C. (2006) An exploratory study into the use of NLP in business, MBA Dissertation, University of Surrey.
- \*Pruett, J.A.S. (2002) *The application of the Neuro-Linguistic Programming model to vocal performance training*, DMA Thesis, University of Texas, Austin.
- \*Ragan, J. and Ragan, T. (1982) *Working effectively with people: contributions of neurolinguistic programming (NLP) to visual literacy*, paper presented at the Annual Meeting of the International Visual Literacy Association (13th, Lexington, KY, October 31 – November 3, in *Journal of Visual Verbal Language*, 2: 2: 67–79.
- \*Raja, R. and Tien, N. (2009) *Exploring multi-modality tools of Neuro-Linguistic Programming (NLP) to facilitate better learning among primary school students* National Institute of Education, Singapore, Redesigning Pedagogy, International Conference 1–3 June.
- Ready, R. and Burton, K. (2004) *Neuro-linguistic programming for dummies*, London: John Wiley.
- Reese, M., Reese, E., Van Nagel, C. and Suidzinski, R. (1985) *Mega-teaching and learning: Neurolinguistic Programming applied to education*, Indian Rock Beach, Florida: Southern Institute Press.
- \*Renwich, F. (2005) The 'A Quiet Place' programme: Short-term support for pupils with social, emotional and behavioural difficulties in mainstream schools, *Educational and Child Psychology*, The British Psychological Society, 22: 3: 78–88.
- Revell, J. and Norman, S. (1997) *In your hands – NLP in ELT*, London: Saffire Press.
- Revell, J. and Norman, S. (1999) *Handing over: NLP-based activities for language learning*, London: Saffire Press.



- Reynolds, D. (1992) School effectiveness and school improvement: an updated review of the British literature, in D. Reynolds and P. Cuttance (eds) *School effectiveness: research, policy and practice*, London: Cassell.
- Ridley, M. (2003) *Nature via nurture*, London: HarperCollins.
- Rinvoluceri, M. and Baker, J. (2005) *Unlocking self-expression through NLP: integrated skill activities for intermediate and advanced students* (professional perspectives ELT series), Surrey: Delta Publishing.
- Richardson, D.C. and Dale R. (2005) Looking to understand: the coupling between speakers' and listeners' eye movements and its relationship to discourse comprehension, *Cognitive Science*, 29: 6: 1045–1060.
- Richardson, J. and Margoulis, J. (1981) *The magic of rapport: how you can gain personal power in any situation*, San Francisco: Harbor.
- Rizzolatti, G., Fadiga, L., Gallese, L. and Fogassi, L. (1996) Premotor cortex and the recognition of motor actions, *Cognitive Brain Research*, 3: 131–141.
- Rizzolatti, G., Fogassi, L. and Gallese, V. (2001) Neurophysiological mechanisms underlying the understanding and imitation of action, *Neuroscience*, 2: 661–670.
- Roderique-Davies, G. (2009) Neuro-linguistic programming: cargo cult psychology? *Journal of applied research in higher education*, 1: 2: 57–63.
- Rodeiro, C.L., Bell, J.F. and Emery, J.L. (2009) *Can Emotional Intelligence predict differences in attainment and progress in secondary school?* Cambridge: Cambridge Assessment.
- \*Ronne, M. (1998) *A theoretical approach to creative expression for school counselling*, PhD Thesis, The Union Institute.
- Rosenshine, B. and Furst, N. (1973) The use of direct observation to study teaching, in R.W.M. Travers (ed), *Second handbook of research on teaching*, Chicago: Rand McNally.
- Rosenthal, R. and Ambady, N. (1993) Half a minute: predicting teacher evaluations from thin slices of nonverbal behaviour and physical attractiveness, *Journal of Personality and Social Psychology*, 64: 3: 443–441.
- Rowan, J. (2009) *NLP is not based on constructivism*, article on the British Psychological Society website, Special Group in Coaching Psychology, accessed 18th August 2009, [http://www.bps.org.uk/coachingpsy/publications/the-coaching-psychologist/nlp-is-not-based-on-constructivism\\$.cfm](http://www.bps.org.uk/coachingpsy/publications/the-coaching-psychologist/nlp-is-not-based-on-constructivism$.cfm).
- \*Sandhu, D.S. (1994) Suggestopedia and Neurolinguistic Programming: introduction to whole brain teaching and psychotherapy, *Journal of Accelerative Learning and Teaching*, 19: 3: 229–240.
- Sargent, E. (2006) *Flying start: coaching your children for life*, London: Marshall Cavendish.
- Schaefer, J. and Schajor, S. (1999) Learning with all one's senses: Neurolinguistic Programming in the teaching of pediatric nursing, *Kinderkrankenschwester*, 18: 7: 289–91.
- Schuster, D. and Gritton, C. (1986) *Suggestive accelerative learning techniques*, London: Gordon and Breach Science.
- \*Semtner, E.A. (1986) *An investigation into the relevance of using Neurolinguistic Programming (NLP) as an aid in individualizing college reading programs*, Dissertation Abstracts International 47(4).
- Sharpley, C.F. (1987) Research findings on Neurolinguistic Programming: nonsupportive data or an untestable theory? *Journal of Counseling Psychology*, 34: 1: 103–107.
- \*Sheridan, R.D. (2008) *Teaching the elderly effective learning strategies in relation to internet use*, PhD Thesis, University of Brighton.
- \*Schleh, M.N. (1987) *An examination of the Neurolinguistic Programming hypothesis on eye movements in children*, Dissertation Abstracts International 48(2), 584-B Biola University, Rosemead School of Psychology.
- Sharp, J.G., Bowker, R. and Byrne, J. (2008) VAK or VAK-uous? Towards the trivialisation of learning and the death of scholarship, *Research Papers in Education*, 23: 3: 293–314.
- \*Skinner, H. and Croft, R. (2009) Neuro-Linguistic Programming techniques to improve the self-efficacy of undergraduate dissertation students, *Journal of Applied Research in Higher Education*, 1: 1: 9–38.
- Smith, A. (2000) *Accelerated learning in practice: brain-based methods for accelerating motivation and achievement*, Stafford: Network Educational Press.
- Smith, A. (2003) *Accelerated learning: a user's guide*, Stafford: Network Educational Press.
- Smith, A. (2002) *The brain's behind it*, Stafford: Network Educational Press.
- Smith, A. and Call, N. (1999) *The ALPS approach, accelerated learning in primary schools*, Stafford: Network Educational Press.
- Smith, L. and Malandro, L. (1985) *Courtroom communication strategies*, New York: Kluwer Law Book Publishers Inc.
- Spohrer, K.E. (2008) *Teaching NLP in the classroom: ideas in action*, London: Continuum.
- \*Squirrel, L. (2009) Can Neuro-Linguistic Programming work with young children who display varying Social, Emotional and Behavioural Difficulties?, in P. Tosey (ed.), *Current research in NLP; vol 1: proceedings of the first international NLP research conference, University of Surrey, 5 July 2008*, South Mimms, Hertfordshire: ANLP International CIC.
- \*Stanton, H.E. (1989) Using Neuro-Linguistic Programming in the schools, *Journal of the Society for Accelerative Learning and Teaching*, 14: 4: 311–326.
- \*Stanton, H.E. (1998) Reducing test anxiety by a combination of hypnosis and NLP, *Journal of Accelerated Learning and Teaching*, 23: 59–65.
- \*Stanton, H.E. (1994) Suggestology and NLP: are there similarities? *Journal of Accelerative Learning and Teaching*, 19: 3: 241–256.
- \*Steinfeld, T.R. and Ben-Avie, M. (2006) A brief discussion of the usefulness of NLP in action-based education research. Paper presented at *NLP and research: a symposium*, Surrey University School of Management, University of Surrey, 16 June 2006.
- Sweeney, J.A., Luna, B., Keedy, S.K., McDowell, J.E. and Clementz, B.A. (2007) fMRI studies of eye movement control: investigating the interaction of cognitive and sensorimotor brain systems, *Neuroimage*, 36: 54–60.
- Taylor, J.A. and Shaw, D.F. (2002) The effects of outcome imagery on golf-putting performance, *Journal of Sports Sciences*, 20: 8: 607–613.
- \*Taylor, R.J. (2004) Therapeutic intervention of trauma and stress brought on by divorce, *Journal of Divorce and Remarriage*, 41: 1–2: 129–135.
- Terry and Churches (2009) *The NLP toolkit: activities and strategies for teachers, trainers and school leaders*, Camarthen: Crown House.
- \*Thalgott, M.R. (1986) Anchoring: a 'cure' for Epy, *Academic Therapy*, 21: 3: 347–352.
- \*Thompson, J., Courtney, L. and Dickson, D. (2002) The effect of Neurolinguistic Programming on organisational and individual performance: a case study, *Journal of European Industrial Training*, 26: 292–298.
- TLRP (2007) *Neuroscience and education: issues and opportunities*, The Economic and Social Research Council.
- Tomlinson, H. (2004) Neuro-Linguistic Programming and professional development: improving communication skills, in H. Tomlinson, *Educational Leadership: Personal Growth for Professional Development*, London: Sage, pp 53–63.
- Tognoli, E., Lagarde, J., De Guzman, G.C. and Scott Kelso, J.A. (2007) The Phi complex as a neuromarker of human social coordination, *Proceeding of the National Academy of Science*, 104: 19: 8190–8195.
- Tosey, P. (2006) *Bateson's levels of learning: a framework for transformative learning?*, paper presented at Universities' Forum for Human Resource Development conference, University of Tilburg, May 2006, [www.nlpresearch.org](http://www.nlpresearch.org).

- Tosey, P. (ed.) (2009) *Current research in NLP, vol 1: proceedings of the first international NLP research conference*, University of Surrey, 5 July 2008, South Mimms, Hertfordshire: ANLP International CIC.
- \*Tosey, P. and Mathison, J. (2003a) *Neuro-Linguistic Programming: its potential for teaching and learning in higher education*, paper presented at the European Educational Research Association conference, University of Hamburg, 17–20 September 2003.
- \*Tosey, P. and Mathison, J. (2003b) Neuro-Linguistic Programming and learning theory: a response, *Curriculum Journal*, 14: 3: 371–388.
- Tosey, P. and Mathison, J. (2007) *Fabulous creatures of HRD: a critical natural history of Neuro-Linguistic Programming*, paper presented at the 8th International Conference on Human Resource Development Research and Practice across Europe, Oxford Brookes Business School, 26–28 June 2007.
- \*Tosey, P., Mathison, J. and Michelli, D. (2005) Mapping transformative learning: the potential of Neuro-Linguistic Programming, *Journal of Transformative Education*, 3: 2: 140–167.
- Turunen, S. (2004) From Neuro-Linguistic Programming to systems intelligence, in R.P. Hämmäläinen and E. Saarinen (eds), *System intelligence: discovering a hidden competence in human action and organizational life*, Helsinki University of Technology, Systems Analysis Research Reports, A88, pp.257–273.
- Varela, F.J. (1996) Neurophenomenology: a methodological remedy to the hard problem, *Journal of Consciousness Studies*, 3: 330–350.
- Vermersch, P. (1999) Introspection as practice, *Journal of Consciousness Studies*, 6: 2–3: 17–42.
- Vidal Rodeiro, C.L., Bell, J.F. and Emery, J.L. (2009) *Can trait emotional intelligence predict differences in attainment and progress in secondary school?* Cambridge: University of Cambridge Local Examinations Syndicate.
- Wake, L. (2008) *Neurolinguistic psychotherapy: a postmodern perspective*, Hove: Routledge.
- Watkins, C. (2001) *Learning about learning enhances performance*. London: Institute of Education School Improvement Network (Research Matters series No 13).
- \*Welham, J. (2004) *Assessing the impact of a whole school learning to learn strategy*, case study report, University of Newcastle-upon-Tyne and Campaign for Learning.
- Wenger, E. (1998) *Communities of practice: learning, meaning and identity*, Cambridge: Cambridge University Press.
- West-Burnham, J. (2002) *Leadership and spirituality*, NCSL Leading Edge Seminar Thinkpiece.
- West-Burnham, J. (2004) *Leadership and personal effectiveness*, Paper written for a seminar at the Royal Garden Hotel, London, November, Nottingham: National College for School Leadership.
- West-Burnham, J. and Ireson, J. (2005) *Leadership development and personal effectiveness*, Nottingham: National College for School Leadership.
- West-Burnham, J. and Huws Jones, V. (2007) *Educating for understanding: spiritual and moral development in schools*, London: Network Continuum Press.
- Whitehead, J. and Lomax, P. (1987) Action research and the politics of educational knowledge, *British Educational Research Journal*, 13: 2: 175–190.
- \*Winch, S. (2005) *From frustration to satisfaction: using NLP to improve self-expression*, in Proceedings of the 18th EA Educational Conference 2005, Surry Hills NSW.
- Winter, R. (1987) *Action research and the nature of social inquiry*. Aldershot: Gower.
- \*Woerner, J. and Stonehouse, H. (1988) The use of Neuro-Linguistic Programming model for learning success, *School Science and Mathematics*, 88: 516–524.
- Yapko, M.D. (1995) *Essentials of hypnosis*, Philadelphia: Brunner/Mazel.
- Yapko, M.D. (2003) *Trancework: an introduction to the practice of clinical hypnosis*, New York: Brunner-Routledge.
- Yeager, J. (1985) *Thinking about thinking with NLP*, Cupertino, California: Meta Publications.
- \*Young, J.A. (1995) *Developing leadership from within: a descriptive study of the use of Neurolinguistic Programming practices in a course on leadership*, Dissertation, Ohio State University, Abstracts International Section A: Humanities and Social Sciences. Vol 56 (1-A).
- \*Zdzienski, D. (1994) The interaction between specific learning difficulties and NLP techniques, *NLP World*, 1: 1: 45–46.
- Zeichner, K.M. (1993) Action research: personal renewal and social reconstruction, *Educational Action Research*, 1: 2: 199–219.
- \*Zhang, N. and Ward, A.E. (2004) *On the adaption of e-learning content to learner NLP input sensory preference*, International Conference on Innovation, Good Practice and Research in Engineering Education, 131–137, Wolverhampton, 3–4, June.
- Zechmeister, E. (2003) *The impact of NLP on the performance and motivation of primary school children*, PhD Thesis, Leopold-Franzens-Universität, Innsbruck.



On this CD-ROM you will find:

- the full report, including Appendices
- a complete list of references
- Leading learning through relationships: the implications of Neuro-linguistic programming for personalisation and the children's agenda in England, by Richard Churches and John West-Burnham.



CfBT Education Trust  
60 Queens Road  
Reading  
Berkshire  
RG1 4BS

0118 902 1000  
[www.cfbt.com](http://www.cfbt.com)