Bangkok Patana School
The British International School in Thailand
Established 1957

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Our mission is to ensure that students of different nationalities grow to their full potential as independent learners in a caring British international community.

Introduction

Welcome to the third volume of the Bangkok Patana Journal of Educational Research. These six articles clearly demonstrate the increasing emphasis which our community of academic staff are placing on reflective practices, collaboration, self-directed professional development and, perhaps above all, an exemplification of the enquiry spirit which we continually seek to encourage amongst our students. It is a testament to this forward-thinking school that we have thoughtful, inquisitive, passionate staff who care deeply about their profession and wish to share with one another their insights and discoveries in the hope that we can move together towards providing a consistently excellent education.

In this volume, Cindy Adair-Bolakoso reveals some of the important ways in which coaching sports has much in common with the teaching of 'mainstream' curriculum. While traditional concepts of education as essentially one-way transfers of knowledge from expert to novice are being quickly undermined, the complexities of learning are being more fully appreciated and so the more traditional boundaries within education are blurring beyond usefulness. Cindy argues convincingly that some key ingredients of best practice teaching are ample within sports instruction. Her main point is that teachers and coaches can learn a lot from one another for the benefit of the students.

Sally Flint sets out to define the important role that a library can play in a leading school, with a clear focus on Bangkok Patana School. She argues that one of a school library's central roles is foremost to foster a love of reading. She then moves on to explain how strategic inclusion of the library, and the vital skills which it promotes, needs to feature in coordinated curriculum planning. She notes that a development plan for the library will help meet its core purposes, and concludes with a positive reflection that there have been recent, valuable changes to support greater integration of the Library into the school's entire learning framework. Her central point is that students are advantaged when library staff work well together with the rest of the school.

Grant Robertson and Simon Shand share some research which they undertook as part of their shared Performance Management objective last year. Through joint lesson observations, they were asking to what extent the IB Learner Profile attributes are catered to in English and PE lessons. While their findings are interesting in themselves, the whole process which these two Heads of Faculty undertook was clearly of huge benefit to each other. They gained insights into ways in which two different subjects can both be underpinned by themes which extend beyond skills and knowledge content. They highly recommend colleagues to take similar opportunities. Their conclusion should be borne in mind by all teams across the whole
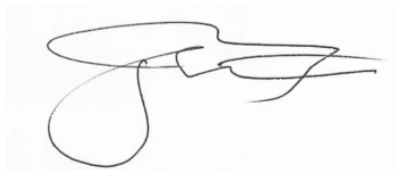
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school as we continue to promote these important qualities, mind-sets and competencies amongst our students.

Also hoping to share the benefits of a collaborative approach to practical research, Colin Brown, Michelle Brinn and Marcus Madden describe a very productive and reflective journey which they took part in this year. They adopted the model of Lesson Study which is a teaching improvement strategy that has long been practised in Japan but is fast gaining currency in many other countries. Their article is succinct, and provides a fascinating summary of the many benefits which such a collaborative approach presented them with. They note some of the difficulties which they encountered with this process, but it is clear that they are now strong advocates of such an approach and conclude with some suggested ways forward relevant to our school.

Kay Wilson traces the theoretical contexts and justifications of creative curricula, noting that these are by no means easy to define. She teases out four main theories which can inform both the rationale and the design of a creative curriculum. Kay explains how child-centred learning, the prioritisation of skill acquisition, deep learning opportunities, and a flexible and dynamic curriculum are key ingredients of a creative curriculum. With this framework in mind, she moves on to evaluate the current and potential successes of a creative curriculum at our school. Her central argument is that embracing a creative curriculum here at Bangkok Patana has been a positive direction, but she highlights two difficulties which we face in terms of time management and the role of subject content. In so doing, Kay offers important considerations as we strive to enhance and strengthen our students' learning.

Kate Penstone invites us to consider the importance that handwriting plays for young learners in developing key writing skills. She challenges a common-place notion that a focus on handwriting in education is merely a matter of developing presentation and neatness. She uncovers some recent research which is collectively drawing our attention to quite powerful ways in which the physical activity demanded by developed handwriting connects to important neural developments. In so doing, automaticity in letter formation promotes valuable text composition skills which are integral to literacy. Her main cautionary note is that if young learners are not equipped with such automaticity, they will face greater challenges when seeking to express their ideas and thoughts through writing.

It is clear to me that my colleagues who have invested considerable thought, care and time in presenting the results of their enquiries here in this volume are indicative of a staff body, and indeed a profession in general, which takes great pride in all that we are seeking to achieve. I, for one, am very grateful that they have made such efforts to share their findings.

James Penstone
Cross Campus Principal

Sports Coaching and Classroom Teaching – More Similar Than You Think!

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Foreword
Traditionally 'us' ports coaches are stereotypically viewed as the non-academic types. Yes we were the ones at the back of the university lecture halls in our Adidas sports gear…And yet, after six years working within the walls of an academic institution I am beginning to realise that this is not entirely a true reflection… The greatest coaches I have observed in action and aspire to emulate are as apt with statistics as an IB Mathematics teacher, as skilled in communication as a Primary EAL specialist, as dynamic as a Secondary Drama teacher and are basing their work on a knowledge base which includes aspects of higher level Biology and Physics. Whilst we do enjoy the relaxed dress code our jobs afford us, there is much to share and learn from the average sports coach.

Introduction
Coaching an athletic sport and classroom teaching have notable differences, but they also have important similarities. What can a classroom teacher learn from a sports coach? In a word, plenty. An essential question in sports coaching is really the same one facing all teachers: 'What do we want our students to be able to do on their own when challenged by any new test of their abilities?' (Cross, 2012). It may surprise you that many of the concepts and pedagogy you use in your classroom practice is being used by your colleagues on the sports field, court or pool deck. Nevertheless many of us coaches do confess to not knowing the technical terms for much of what we do!

Researchers have previously explored the concept of bringing successful sports coaching methods into the classroom. In 1974 university psychologists Ronald Gallimore and Roland Tharp studied renowned basketball coach John Wooden's coaching and teaching of the UCLA team during the 1974-1975 season. (They updated this study in 2004.) They wanted to determine if there were lessons in his coaching skills for all educators. Wooden began his career as a high school English teacher, and much of his coaching practice was based on what he had learned as a classroom teacher. Gallimore and Tharp concluded that 'Wooden's intense and diligent planning was the underpinning of a coaching strategy that included giving the students a lot of information, not much praise, and speaking briefly and succinctly at all times' (Gallimore, 2004).

Authentic Assessment
The effective athletic coach (not to mention music, drama and dance coach, among others) understands that the performance, the game/the race, is truly the best teacher. 'The coaching cycle of model-practice-feedback-practice-performance-feedback provides the key to developing good learning habits in players,' (Andrian, 2012). The goal of any curriculum therefore, is not to have students simply accumulate information but to change their patterns of behaviour, to have them undergo, as the educator Ken Bain has written, 'transformations that affect both the habits of the heart and mind and the capacity for continued growth' (Bain, 2004). Assessment situations which reflect real-life as much as possible are often the best learning moments (Schuetz, 2013).

Communication Style
Coaches must communicate concisely, clearly and include praise if they are to be heard over the average cheering crowd and elicit a positive response from their team/individual athlete. Effective coaches are masters of the sound-bite. Great coaches also ask lots of questions. Due to the difficulties many coaches experience when trying to communicate verbally (due to noise/environment) many have mastered the art of communicating non-verbally, using demonstration, peer demonstration, hand signals and technology to aid the delivery of their message. All of these strategies are in the arsenal of a good teacher as well.

Character Development
Sports training and performance exposes one's character. Under pressure, athletes will show who they really are. Will they

persevere or give up? Will they stay cool and calm or lose their temper? Will they do the right thing instead of the easy thing? This gives coaches a unique opportunity to build character by mentoring and supporting their athletes through the challenges and situations they face. Winning, losing, success, failure, selection and non-selection all present these teachable moments. Great coaches get to know their athletes both in a sporting sense and also holistically. Coaches can help athletes to redefine their mental and physical limits.

Data-Driven Decision Making
Coaches have long used statistics to identify strengths, weaknesses of their team as well as those of the opposition to prepare game plans. Similarly, timely and specific assessment data can drive change and progression in a classroom. Poor results in a particular area of the SATs in a Primary School may drive focused initiative/interventions to remedy this. Effective coaches gather data on their athletes' (and opponents') performance both at training and in competition to be used as feedback, to inform selections (and justify non-selection) and to provide motivation. It must be noted too that often it is in the collection of this data that the most learning is achieved – assessment for learning!

Collaboration and Teamwork
Google 'teamwork' and invariably you'll be lead to a range of sporting images, quotes and video clips. But team-work need not exist in the realm of the sports team alone. Great coaches clearly define roles within a team and understand they are only as strong as their weakest link. 'Taking skilled players and putting them in a game at the same time can often yield underwhelming results. This is especially true if multiple players have the same skill set, and end up trying to do the same thing. A line full of hockey scorers generally won't fare as well as a line with two scorers and a passer. A basketball lineup filled with three-point shooters will struggle compared to a combination of three-point shooters, rebounders and passers. Using effective teamwork includes finding the right combination of players and putting them together to optimise their skill sets. A scorer and a passer are a natural combination, as they can both use their primary skill sets to enhance the team's performance' (Bisson, 2013). In a classroom setting, collaborative planning, team-teaching, group presentations/performances and cooperative brainstorming whilst challenging for some participants often produce the most meaningful learning and achievement. Athletes and students can be taught that success has a direct relationship to cooperation.

Differentiated Instruction
Many sports have a range of positions or individual specialties which require the coach to train both the individual and then integrate that individual into a team setting. Teaching a class of 20 students is no different as each individual will have his/her own set of strengths, weaknesses, quirks and interests. Great coaches can identify unique skill sets and position the athlete accordingly; they also plan to include both time for individual skill development and group drills which develop techniques and patterns of play to produce success in every practice. Even in individual sports a great coach will use the strengths of certain individuals to push/challenge or support/encourage others. Just as effective classroom teachers do not remain wedded to the syllabus and content coverage upon witnessing poor student performance (i.e. weak understanding and lack of transfer of prior learning to new contexts), so too, good coaches usually have their overall design plans for the season but adjust their 'unit design' based on their assessment of the team's game performance after each contest during the season. It is crucial, therefore, that the learners' progress or lack of progress dictates the pacing of the teacher/coach curriculum.

Making Repetitive Drilling Fun
When it comes to the fitness aspect of athletic performance there are no short-cuts and there is no escaping a degree of repetitive drilling or just plain hard work is required. I would imagine a Year 3 – 4 classroom teacher must feel the same way when teaching the times tables or a Year 7 – 8 Science teacher teaching the periodic table. A great coach will inject interest through careful periodisation, clever exercise selection, progressive overload and plenty of varied training aides. Effective coaches are masters at providing mental challenges even when the physical challenge remains unchanged.

Flipped Classroom
Many coaches lament the amount of time they have to prepare their athletes. At Bangkok Patana this is very much the case as we all compete for our students' precious time. Great coaches circumvent this by encouraging athletes to study video, review their game plans or undertake extra strength/conditioning outside of team practices. These sessions are reserved for checking understanding, honing skills and rehearsing game plans prior to competition.

Connected Learning

Achieving athletic success is connected learning in action! Sports Science + Nutritional Science + Psychology + Biology + Physics (Biomechanics) + Recovery + Luck J Effective coaches take the time to explain the links between the factors which can create an environment where peak performance can occur. Getting the balance right is then a matter which links back to data-driven decision making (competition stats) and interpreting the results of authentic assessment (meet/game/match results).

Conclusion

Effective coaches and teachers have many similarities and could learn a great deal from observing one another in action. Many of the terms we use to describe great teaching are also practised on a daily basis by great coaches. Whether in classrooms or on the field/court or pool, the long-term aim of learning is the same: to perform effectively and independently, in a variety of situations, environments and contexts.

Bibliography

ANDRIAN, B. 2012. *Teachers Can Learn From Coaches* [online]. Available from World Wide Web: <http://www.sentinalsource.com>.

BAIN, K. 2004. *What the Best Teachers Do.* Cambridge, Mass: Harvard University Press.

BISSON, J. 2013. *Teamwork and Sports* [online]. [Accessed October 2013]. Available from eHow: <http://www.ehow.com>.

CROSS, N. 2012. How the Football Coach Can Help Principals and Teachers. *Phi Delta Kappan*, 94.

GALLIMORE, R. 2004. What a Coach Can Teach a Teacher. *The Sports Psychologist*, (18) pp.119 - 137.

SCHUETZ, R. 2013, September. What can Teachers Learn from Effective Coaches? [online]. [Accessed December 2012]. Available from Nocking the Arrow Blog Spot: <http://www.rtschuetz.blogspot.com>.

Working Towards a Great School Library

Sally Flint
Head of Libraries

Abstract

The purpose of this paper is to reflect on what a Teacher Librarian's role should be in schools. An evaluation of the role of a good librarian is given. This is followed by a summary of our current library practice and ethos at Bangkok Patana School and conclusions are then drawn about what we currently do well and where there is room for improvement in meeting our students' needs. These will be used to inform future curriculum development and planning at Bangkok Patana School. Specifically this article will be referred to when creating a development plan for the library. (The evaluation will not include any comments on the Thai Library team.)

A Teacher Librarian's Role

The Australian School Library Association (2001) identifies three main roles of the Teacher Librarian. The first role is to be a curriculum leader who focuses on embedding information literacy skills across the curriculum. The second role is as an information specialist who provides access to a variety of information resources in various formats and the third role is as an information services manager who develops a collection that reflects the ethos of the school and supports the curriculum.

The American Library Association and Association for Educational Communications and Technology 1998, has similar definitions. In addition to the first three, it identifies a role labelled Program Administrator. This role includes developing policies, programs, and practices that enrich and enhance student learning and also the management of budgets, people, equipment and facilities. This administrative part of a Librarian's role is therefore quite complex and can often be very time consuming.

Significantly, whilst these definitions do encompass the Teacher Librarian's role of enabling children to complete good research and whilst they do imply the importance of having appropriate resources to encourage learning, they do not include any reference to encouraging children to love books and reading. Perhaps this is a given, but it is so important that I consider it worthy of explicitly stating as one of a Teacher Librarian's roles.

Reading for pleasure must be valued and encouraged. Ofsted Raising Standards improving Lives. Excellence in English - what we can learn from 12 outstanding schools - states 'The curriculum in each of these schools [that did well] gave a high profile to reading for pleasure' (2001, p.7). The IPF/Booktrust defines successful school libraries as those which are being 'well-used and demonstrating innovative approaches to engaging children in reading' (Greenwood et al. 2007, p.1). Professor Teresa Cremin, former president of the UK Literary Association states 'pleasure reading is important for both educational attainment and arguably, for social mobility' (2013, p.4). Its importance should not be underestimated.

Evidence of the correlation between reading and success is ample. A paper on Pre-school Early Literacy Programmes in Ontario Public Libraries shows the power of reading. Observations show that 'early literacy skills have been shown to be reliably and significantly correlated with future reading success' (2013, p.1). In 2003 and 2006, OECD conducted its Program for International Student Assessment, including 15-year-olds in more than 40 industrialized countries and found that the most important predictor of academic success was the amount of time that students spent reading and that this indicator was more accurate than economic or social status; it found that 'the time spent reading was highly correlated to success in Math and Science; and that the keys to success lay in teaching students how to read and then having them read as much as they can' (Braxton, 2008, p.3).

The National Literacy Trust research undertaken to create a plan for improvement for school libraries established a very strong statistical relationship between academic attainment and school library use and concludes that 'young people who read above the expected level for their age were twice as likely as young people who read below their age to be school library users' (Clark, 2010, p.6).

Consequently, creating a love of reading and books is to my mind a fundamental aim of a good library and librarian. The

teacher librarian's job certainly encompasses all the roles outlined above, but, in addition, I think it is vital that they grab the children's attention early, enthuse them about reading and books and maintain this enthusiasm for reading into young adulthood.

Environment

A library must be a safe haven; a magical place; a treasure trove of attractive, popular, modern and classical books and interactive activities to entice and enchant its visitors, leading them to a lifelong path of learning. The primary, essential goal of the school library must be to instil in our children a longing to visit the library and a love of reading for pleasure from day one of their school career, and to see the library as a centre for this.

Both teachers and children should be encouraged to make time to visit the library. The librarian must ensure that the children can navigate the space and have a clear understanding of its layout and what is available. Books should be easy to reach; displays should be colourful, age appropriate and frequently changed. Popular authors should be clearly visible to the children and made readily available. An inviting environment encourages learning. Our initial attitude towards something will influence future success in it; therefore, it is essential to show our students that the library is a great place to be. Children must enjoy their experience of visiting the library.

Frequently Used

If the library is to fulfil its educational role it must be central to children's school life, so what better way to achieve this than to take them to it? Visiting the library should be part of a child's school experience as soon as it is logistically possible; this should continue throughout their school career. This expectation should be outlined in the school curriculum. If children are considered to be too small to physically take to the library, then the library and librarian must take itself to the children's daily learning environment. We can all remember the Reading Corner in our Primary schools but a shelf of tired-looking books is no longer appropriate – the library must be seen from the beginning as offering a vibrant and exciting experience and ultimately as an essential aid to good learning. Literacy as a Leisure Activity: Free-Time Preferences of Older Children and young adolescents states, 'Given the importance of reading to lexical development in school-age children and adolescents, reading should be promoted as a leisure activity during these years' (Nippold, 2005, p. 93). There is no end date to reading being significant and important.

Curriculum Planning

The incorporation of reading skills into the school day needs careful planning. Too often schools link reading only with literacy or English lessons. The inclusion of trips to the library for pleasure, as well as for research, should be seen as valuable across the whole-school curriculum. The sessions spent in the library must be engaging, motivating and include a range of interactive activities. Cremin claims 'If our focus is the skill to read only, and not the will, we lose the capacity to extend that attainment through focusing on the pleasure.' (BBC News Viewpoints: Do children need to read more books? p. 2). Librarians must be actively present with the children, to chat encouragingly with them and engage them in appropriate print material. The Teacher Librarian's primary role is not as reading instructor but nevertheless there is much that the Teacher Librarian can do to support children's reading development through the library. For this the librarian needs to have knowledge about how children's brains work and how they learn. This is why in a school at least, the best librarians should be teachers with expertise in the area that they are focusing on.

Keeping Abreast and Ahead of Change

When librarians are unsure about an aspect of their role, for example the increasing inclusion of IT into the library, they should resist feeling isolated or defeated and ensure that they find opportunities to hone their own skills. They must reach out to the IT department and work hand in hand to ensure that the teaching of research skills involves an appropriate balance of online and book based resources. The very best librarians will at the very least metaphorically, but ideally actually, knock down the walls between the two areas and bring the printed text and media text together. The aims of an Information Specialist and a librarian overlap considerably. A good school, with an awareness of what is required, will provide the PD provision for up-skilling and training for IT and librarians and IT specialists will work together to meet the children's needs.

As the children get older the librarian must be alert to changing trends and attitudes and pre-empt them. Popular series, graphic novels, and audio books should be used as hooks to entice and motivate readers of all ages. Book clubs and book talks should be encouraged. Reading must be seen as cool and the help of the 'coolest' teachers in the school should be employed to keep reading high on the agenda through activities such as participating in competitions and tweeting their favourite authors. Libraries must not be places full of be quiet signs or musty old texts. Both print stock and media facilities should be cutting edge.

Central to the School Ethos

The best libraries are central to the whole school ethos and actively support what is happening across the whole curriculum. Any school and any library that do not mutually support each other is failing. This level of cooperation takes effort; it means creating shared planning times and it sometimes involves facing and challenging ingrained attitudes amongst both teaching and library staff about what a good library should be and do. Many a librarian can feel like Cinderella - whom no one thinks to invite to the ball. Forward thinking librarians will work to change this – they will invite themselves to the ball again and again until their experience and contributions are expected and welcomed. The location of a school library and the value placed upon it by the school's leadership are key indicators of whether a library and school are working hand in hand. OFSTED report Good School Libraries: making a difference for learning states 'the most significant element in bringing about improvements was the commitment and support of effective head teachers' (2006a, p.56). This is essential. The library must belong to everyone in the community and be valued by everyone. The Teacher Librarian should not view the library as belonging to them; it belongs to everyone, with them in the role of a custodian.

A Short Overview of our Library Goals at Bangkok Patana School

The Early Years Library

The primary purpose in our Early Years Library is to extend the love of books created in the Foundation Stage. In Early Years, the children are constantly encouraged to love stories and are given the freedom and flexibility to explore the library space and facilities. Rhymes and sounds of language are explored during the reading of stories. The children's understanding of narrative is checked; the children are encouraged to ask and answer questions. The library encourages the playing of games and has a writing area to promote literacy. The sessions begin with routines which fit with what happens in their regular lessons. These include story-time songs, getting attention with the book and meeting and greeting rituals. In Ofsted Raising Standards improving Lives – 5 October 2011 'Research and evidence from Ofsted's inspections show that the critical age when children learn to be good readers and writers is between three and seven' (2013, p.1). Phonics is then important and the Early Years' librarian plans to acknowledge and include this far more is currently happening when working with individuals and small groups.

Links are made to the wider curriculum in Early Years and the librarian is aware of the main learning area and the main attributes being explored. The key curriculum areas to be covered are: physically understanding the library space; learning the rudiments of Dewey; being able to find books and understanding the key features of both fiction and non-fiction texts. The children are introduced to the skills of completing research using a three-step model of plan-do-review. The children are encouraged to find books using both the regular catalogue and an Early Year Picture catalogue set up on the iPads available for them to use. A range of both competitive and non-competitive activities takes place throughout the year, encouraging the children to extend their reading habits. Teachers are encouraged to book library staff to visit classes and work with the children in completing research based activities reinforcing the rudiments that are delivered in the lessons.

Years 3 and 4

As the children move into Years 3 and 4, the role of the librarian as curriculum leader and information specialist becomes slightly more dominant. On a fortnightly basis, the children are formally taught library and information skills. This is couched alongside the development of book talks and whole-class reading challenges. The children have a fortnightly protected 'reading time' during which they can choose their leisure reading and draw on the librarian's expertise in selecting texts. The teachers and librarians have worked together to give guidance on what their role should be to ensure that the children are meaningfully engaged during this time.

The Teacher Librarian and class teacher suggest appropriate fiction for read aloud or read alone; book challenges are encouraged; the use of digital books is explored. The children become competent at using all aspects of the Library Users' OPAC system and are skilled in using appropriate databases and websites. Class displays are used to enhance learning. Student voice is clearly heard and listened to throughout Primary with the active use of the Library Council to lead and organise initiatives.

Years 5 and 6

In Years 5 and 6 the love of reading and pleasure in reading continues to be valued. Regular class book talks take place. The librarian has an excellent knowledge of both the class curriculum, the books and the children, so is able to guide choice making. The children take part in a large reading challenge that involves all the Year groups. Involvement in external reading and writing competitions are co-led by the teachers and librarians. The skills of research are built upon and the children are encouraged to use our 'Super Six' approach to completing research. This follows on from the 'Big Three' that they have been using previously and leads into the learning and research skills that the children will go on to use in their 'Learning to Learn' course in Year 7. Rather than the pedagogy being that 'research' must be taught in one way, the approach has been one of flexibility and willingness to change. Gaps in the children's knowledge about approaching research has meant that a 'standalone approach' has been adopted for the last two years. As these gaps lessen due to our Year 3 and 4 programme, it is becoming more possible to embed the teaching of research into the main curriculum. The teacher/librarian is involved in the planning of this at Year Team meetings.

Secondary

Worthy, Moorman, and Turner (1999) reported that when children and adolescents engage in voluntary reading about topics that truly interest them, their effort, motivation, and attitudes about reading improve. They also reported that allowing students to read simpler materials such as comics and magazines can improve basic reading skills leading to increased confidence. With this in mind, in Secondary we are keen that students continue to be allowed to visit the library for pleasure reading during the school day. At present, Years 8 and 9 come on a fortnightly basis, where they change their books and enjoy some quiet reading time. This is supervised by the English teachers who bring the students and interact with them regarding reading choices and making book suggestions. Year 7 do not currently have a regular library slot, due to the implementation of a new course last year, which in effect replaced their reading lesson. Key Stage 4 and above do not have regular reading sessions in the library due to curriculum demands, though some teachers bring students on an ad-hoc basis for pleasure reading.

Despite the reduced library time, reading interest and motivation is encouraged and promoted extensively. A bi-annual World Book Day occurs across the whole school where the students enjoy dressing up as book characters, drop everything and read and take part in reading challenges. Regular reading raffles, house competitions, reading drives and author visits timetabled into the curriculum, mean that the library does have a high profile. E-platforms, daily notices, and powerful all-school displays promote reading for pleasure. Lessons for research skills and referencing skills are planned and taught school-wide in Year 7. Library staff are available across the whole school to be booked by the teachers to support learning. In addition, Year 10 are taught referencing as preparation for their IGCSE courses at the beginning of the year and Year 12 have research and referencing reinforced as part of their Extended Essay IB work. Frequent communication takes place with students and parents and staff in order to share book lists. The librarians work hard to be aware of the reading culture of the children and promote it through read-a-like and other displays.

Conclusions Drawn

The ethos of the whole-school library at Bangkok Patana is one that extensively supports reading and provides the building blocks to enable the students to complete effective research. Enjoyment and love of reading is encouraged by a large range of innovative and fun activities that are age and interest appropriate. The library environment is attractive and the children's interest and attention is caught and maintained. More curriculum time for reading for pleasure, at least in Year 7, is desired. The library best supports the curriculum needs where the librarians attend the planning meetings. This occurs well in Primary and needs to be more of a focus in Secondary. Librarians are active in development groups but as these meetings occur simultaneously they cannot be in all of the groups. The inclusion of the library in all areas of the school's curriculum map is desirable.

The flexible approach to planning does work well and stands well within an overview of what 'library' or research skills the students should have at particular ages. Clear planning documents for the stand-alone aspect of the syllabus exist in the Primary School and benchmarks have been created in Secondary, but they need wider inclusion in whole-school planning. The knowledge of the Teacher Librarians as ex-classroom teachers stands them in good stead for understanding the children's personal needs and learning styles.

All the libraries are utilised extremely well during breaks and lunchtimes. They are welcoming, personalised and desirable places to attend. Positive literacy behaviours are being encouraged for all children. Increasingly close links are being made with IT specialists in the school and some shared planning is occurring.

The key strengths are:
    Motivational activities to encourage reading across all age ranges.
    The Key Stage 2 Curriculum and planning approach.
Areas to develop are:
    The greater inclusion of the library in whole-school planning documents.
    The creation of opportunities for Year 7 to visit the library for pleasure during curriculum time.
    The creation of a whole-school library development plan.
Overall the libraries are good, the stock excellent and the ethos very positive. The libraries are valued and increasingly becoming central to the school and are seen as desirable places to be.

Bibliography

BBC NEWS UK. 2013. Viewpoints Do Children need to read more books? [online]. [Accessed 5 October 2013]. Available from: http://www.bbc.co.uk/news/uk-24397801.

BISHOP, K AND JANCZAK, S, 2007. Recruiting the Next Generation of School Librarians. *Library Media Connection.*

BRAXTON, B. 2008. The Teacher Librarian as Literacy Leader. [online]. [Accessed: 2 October 2013]. Available from: http://www.redorbit.com/news/education/1324258/the_teacherlibrarian_as_literacy_leader/.

COMMITTEE ON DEVELOPMENTS IN THE SCIENCE OF LEARNING. 2010. How People Learn Brain Mind Experience and School. [online]. [Accessed 4 October 2013]. Available from: http://www.nap.edu/catalog.php?record_id=9853.

DOUGLAS, J., AND WILKINSON, S. 2010. School Libraries: A plan for improvement. National Literacy Trust Transforming Lives & Museum Libraries and Archives.

MORRIS, B. J. 2005. The Emerging School Library Media Center From the Past into the Future. *Knowledge Quest.* **35**(5).

NIPPOLD, M.A., DUTHIE, J.K., AND LARSEN, J. 2005. Literacy as a Leisure Activity: Free-Time Preferences of Older Children and Young Adolescents. *Language, Speech, and Hearing Services in School.* **36** (93-102).

GREENWOOD, H., CREASER., AND MAYNARD, S. 2008. Successful primary school libraries: Case studies of good practice. *LISU Research & consultancy for performance management information, cultural & academic services.* Loughborough University.

OFSTED. 2011. Children's Book Week. [online]. [Accessed 1 October 2013] Ofsted raising standards and improving lives. Available from World Wide Web: http://www.ofsted.gov.uk/news/children/%E2%80%99s-book-week.

PETERSON, S. S. 2012. Preschool Early Literacy Programs in Ontario Public Libraries. *The Canadian Journal of Library and Information Practice and Research.* **7**(2).

RANKIN, C., BROCK, A., AND HALPIN, E. 2009. The role of the early years' librarian in developing an information community: A case study of effective partnerships and early years literacy within a Sure Start project in Wakefield. [Online]. [Accessed 1 October 2013]. Available from: http://www.docstoc.com/docs/18788806/the-role-of-the-early-years-librarian-in-developing-an-information.

Purple People Projects

By Grant Robertson and Simon Shand

Background

In September 2012, a new initiative was introduced at Bangkok Patana School where staff who had completed a minimum of two contracts could opt for an alternative to having a second formal lesson observation in the first year of the new cycle. The project would require the agreement of the individual's Performance Manager. This initiative is now fully operational with a variety of projects completed or ongoing.

Staff either work alone or collaboratively on a new project over the course of the year where student learning is fundamental to the aims, objectives and outcomes. The initiative adopted the name 'Purple People Projects' purely by chance when those individuals eligible were highlighted in a document in purple; the name stuck.

Simon Shand (Head of PE) and Grant Robertson (Head of English) decided it was an excellent opportunity to work together on a project that had the IB Learner Profile as a focus and would incorporate cross-faculty observations.

Collaborative Cross-faculty Lesson Observations

Rationale
IB Learners strive to be:
  Inquirers
  Knowledgeable
  Thinkers
  Communicators
  Principled
  Open-Minded
  Caring
  Risk-Takers
  Balanced
  Reflective

The main objective of the project was to create a collaborative lesson observation process across faculties (English / PE). The main focus was to observe the use of the IB Learner Profile in Year 7 and draw conclusions about how best to incorporate the features of the Learner Profile in future across all Year groups. We agreed to jointly observe a range of Year 7 PE and English lessons because this particular Year group is the focus for the Key Stage 3 Review. Year 7 are experiencing a new skills-based 'Learning to Learn' course where the IB Learner Profile is integral. Year 7 also experienced a skills-based 'Balance' unit which was influenced by aspects of the IB Learner Profile.

We also wished to identify and celebrate differences and similarities in practice across different disciplines. PE and English seem like very different subjects but both are primarily skills-based so a further aim was to share best practice in developing skills where appropriate. We also decided to work together because we have considerable experience of leading our respective faculties at Patana; we have spent considerable time in the culture of the host country; we have discussed learning previously in an informal ad hoc way and wished to formalise our discussions.

We are both firmly of the view that the IB Learner Profile is an extremely useful framework for both students and staff when facilitating the most important aspects of learning so this project could only be of value.

Protocol

The focus of the observations was to identify which aspects of the IB Learner Profile (IBLP) were being prioritised and

the extent to which the aspects were made explicit to the students. We also wanted to consider whether or not explicit referencing is actually beneficial to student learning: implicit awareness may be adequate. Furthermore, we wished to consider the possibility that repeated explicit referencing to the IBLP could become tedious for the students and thus counterproductive.

It was agreed that most observations were approximately thirty minutes, so slightly longer than the average Bangkok Patana drop-in but not as long as a formal observation. We felt that this amount of time would give us a comprehensive impression of how the IBLP is being used. Thirty minutes also allowed us to observe two lessons and have chance for immediate post observation discussion within the timeframe of a double lesson.

We agreed that it was very important that we gave quick and helpful feedback to the staff observed. It was also very important that staff knew what we were looking for. The focus was not to judge the quality of learning taking place but rather to look for features of the IBLP in the lesson. We also gave feedback to faculty leaders and then to the whole secondary staff.

The main outcome of our findings is to embed the most appropriate features of the IBLP in our schemes of learning and then observe the extent to which this has an impact on student learning.

Process

Nine different lessons were observed across both faculties, each time with Simon Shand and Grant Robertson observing together. The evidence of IB Learner Profile attributes being engendered was collected using a simple tick sheet requiring examples. Immediate discussion after every lesson took place at which this evidence was evaluated. Conclusions were made as to as to how implicit / explicit the referencing of IB Learner Profile (IBLP) has been in each subject and what implications there are for future learning, especially in terms of schemes of learning and short-term planning. Inevitably we also shared our impressions of the learning taking place because we were excited to share in the best practice observed. Our approach with staff was open and transparent at all times so we did not share observations of areas for development unless they pertained to how the IB Learner Profile was being used.

Conclusion and Recommendations:

The IB Learner Profile attributes are currently more *implicit* than *explicit* in student learning and this is true of both faculty areas. In the majority of lessons observed most, if not all, aspects of the IB Learner Profile were identifiable. Students exhibited most attributes and these attributes were actively encouraged by staff but rarely referred to explicitly.

It was evident that the different nature of our subjects gives different opportunities to highlight the IB Learner Profile attributes (PE naturally covers a wider range, English a narrower band) in lessons.

The lessons observed showed clear opportunities to focus on certain key attributes and ensure that students are explicitly aware that they are a focus for the lesson. This should be communicated to the students and reinforced at key moments in the lesson, perhaps through teacher reinforcement, group evaluation or whole-class feedback. It is not necessary for the key attributes to be referred to constantly or for them to be the main learning outcomes of the lesson but students and staff should be aware of which attributes will best help facilitate the overall success of the lesson. It seems evident that this would be true in all faculty areas.

We are now be able to highlight specific attributes in specific schemes of learning and would also encourage that staff identify the key attributes when planning lessons. The project was also beneficial for us to observe students in very different contexts and identify similarities and differences in approach to learning when in different subjects, with different teachers and in very different learning environments.

The project has also confirmed our belief that strong teaching in our respective areas is facilitating excellent learning. Although this was not the main focus, it was great to be able to celebrate some excellent practice across the faculties.

Professional Development and Collaborative Appraisal Through the Lesson Study Process

By Colin Brown, Michelle Brinn and Marcus Madden

Within a school such as Bangkok Patana, the potential for enhancing student learning through the sharing of professional expertise is incredibly high. Consideration of this led three Year 1 teachers to share their understanding of student learning through the Lesson Study process. This discussion will briefly outline the experience of the Lesson Study process and reflect upon its potential as an additional strategy for professional development.

When deciding to explore the Lesson Study concept it was agreed that the project could be beneficial on two separate fronts. Firstly, it could enhance our own professional practice though a focus on an aspect of student learning. Secondly, by gathering our thoughts and insights into the process and value of Lesson Study, the project may inform further professional development within the school.

Background to Lesson Study

Lesson Study is a form of professional development that originated in Japan the 1870s. It has since developed to be a major strategy in the country's development programmes in schools. More recently it has been adopted in schools around the world – most notably Singapore and the UK.

Professor Peter Dudley from the University of Leicester is a key leader in disseminating the method to schools in the UK and around the world and was also the leader of a Lesson Study programme developed for the DfES (Dudley, 2008). An article in the Guardian (Williams 2013) sparked an initial interest in the Lesson Study process. Further research uncovered a number of useful resources including a Lesson Study manual from Lesson Study UK (Dudley, 2011). The advice and materials therein enabled the initiation of the project.

What have we Learned from Lesson Study

Background

The initial discovery and sharing of the article sparked interest and debate about what a Lesson Study could do for us. The collaborative and non – judgemental nature of the process appeared an ideal way to explore and potentially improve our practice in a stress-free manner. One of the key features of Lesson Study is that team members co-create the lessons being investigated and thus as all participants are equally responsible for its creation, the stress that often occurs within a more formal observational situation would be removed. However, the structure and format of the process ensured that it remained rigorous and thus its potential for enhancing student learning remained.

As noted above, our aim was to improve our own practice, through an investigation of a particular aspect of student learning. However, it was felt that engaging in a reflection of the process itself may be of benefit. This may be of assistance to colleagues that might be interested in doing a Lesson Study. Furthermore, such a reflection could be beneficial if a wider application of the Lesson Study as a method of professional development were to be considered.

Method

The method is fully described in the LSUK Guide Book (Dudley, 2011), but a brief description will be given here. Small teams of teachers (ideally three) choose an area of children's learning which is either considered problematic or holds a great interest for the teachers. A sequence of three observed lessons are co-conceptualised and co-planned. Generally the three planned lessons will be taught by only one of the teachers. The other two teachers act as observers and will pay particular attention to three specific children in the class. Prior to the lesson observations taking place, detailed criteria for success will be decided upon and the learning histories of all three children shared. The plan for the observed lesson will outline expected outcomes for each of the focus children. The target children are then interviewed by the observers at the end of the lesson. After each observed lesson the team meet to share their experiences and observations of the learning. Insights are shared and ideas generated as a basis for following lessons.

At the end of the three lessons, overarching conclusions are drawn and some form of sharing with colleagues is prepared. In Japan, further questions for ongoing Lesson Study investigation may also be framed. Observations and feedback from each Lesson Study cycle are usually shared among the staff of the school. Some Lesson Study teams in Japan have been working together for several years. In Japan, feedback may also be shared among several schools in a conference to share the collective insights of the investigations.

Lesson Study: Initial Reflections

Positives
- Caused deep reflection on an otherwise puzzling aspect of the children's learning.
- Working collaboratively with other colleagues on a key aspect of teaching and learning was very interesting and rewarding. Our varied but extensive experience with the issues of learning in our particular Year group ensured that discussion and debate was relevant, insightful and (most usefully) initiated a range of practical strategies to address our initial issue.
- We felt we made good progress in enhancing the teaching and learning for the children in all our classrooms.
- Some of the insights gained were surprising, but interesting none the less.
- It was agreed that observing another teacher at work was very rewarding as the analysis of a colleague's teaching promoted self-reflection.
- The increase in understanding in the specific area led to the development of resources for use by the whole Year team.
- It was not too hard to find a slot where two teachers could observe the third, with no cover implications.
- The insights derived were quickly disseminated to the other two classes and clear evidence of improvements within the children's learning has been observed in all three classrooms.
- The process led to an increased focus on high-level professional conversations that centred on student learning.
- Though offers of cover were given by the Head of Year and Head of Curriculum, fortuitous timetabling meant that no additional cover was needed to enable the observed lesson section of the Lesson Study.

Negatives
- In the busy flow of school year, creating sufficient time for three people to meet, plan and talk about the ideas being wrestled with was more difficult than we imagined (though not impossible).
- Although it may have been most beneficial to discuss each lesson immediately following the observation, this was impossible. Consequently, there was a delay of a day or two between the lesson observation and discussion. Cover to enable these contemporaneous meetings may well have been useful here.
- Writing up conclusions in a timely manner for sharing with staff has also proved time-consuming.

Interesting
- In the course of the project, several other members of staff have shown an interest.
- Additionally, even with only anecdotal conversations about the process, much high-level professional discussion about student learning has occurred.
- Observations of barriers to learning that some children experience caused professional reflection and adjustments made in all lessons.
- Trust levels between the participating teachers was already high, but has been increased in the process of the Lesson Study.

Top Tips
- Choose very easy Lesson Study questions to start with. Consider that in the flow of the academic year at Bangkok Patana School, often it is better to under-commit and complete rather than overextend and fail to finish. If the Les-

son Study experience is positive, additional more challenging studies may be worked on subsequently.
- Follow the recommendations in the Lesson Study UK Guide (Dudley, 2011) having an archive of the meetings helps, especially when it comes to reporting findings to colleagues.

Conclusion

The professional debate and practical strategies engendered by this process led us to conclude that the Lesson Study was highly beneficial to our professional development. Consequently, we wish to suggest that the school consider supporting other groups of teachers interested in this form of CPD. For the school, there may be resourcing and staff cover implications if this process was more widely adopted. Thus, it may also be beneficial for a further series of Lesson Study cycles be undertaken in other parts of the school, to verify the benefits that we have observed.

Bibliography

DUDLEY, P. 2008. *Improving Practice and Progress through Lesson Study: A Guide for Headteachers, Leading Teachers and Subject Leaders*. London: DfES.

DUDLEY, P. 2011. *Lesson Study: a Handbook* [online]. 2011. Williams: lessonstudy.co.uk. [Accessed October 2013]. Available from
http://www.theguardian.com/teacher-network/teacher-blog/2013/oct/08/professional-development-learn-schools-abroad.

A Critical Review of the Creative Curriculum at Bangkok Patana Primary School

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By Kay Wilson

Introduction

In recent years, the concept of a creative curriculum has been at the forefront of the educational agenda. The National Advisory Committee for Creativity and Culture in Education's (NACCCE) All Our Futures report published in 1999 highlighted the need for a stronger emphasis on creativity. This was followed by additional support from the Department for Education and Skills (DfES) in 2003 with their Excellence and Enjoyment paper and the Rose Review in 2009 (Alexander, 2010). With so much emphasis on creativity, it is not surprising that many schools have chosen to adopt a creative curriculum.

This paper looks critically at the creative curriculum developed in Bangkok Patana Primary School (Bangkok Patana). It will start with a brief background of Bangkok Patana to give context to the review before moving on to define a creative curriculum and the rationale for its implementation. It will then consider the work of progressive and constructivist theorists, with particular reference to Rousseau, Dewey and Vygotsky, and determine how this supports a creative curriculum. The Bangkok Patana creative curriculum model will then be analysed and evaluated in relation to theory and good practice. Limitations of the Bangkok Patana model will also be considered along with recommendations for improvement.

Background

As we know, Bangkok Patana School is a large international school located in Bangkok, Thailand. At the time of writing 63 nationalities make up its student body. In August 2010, curriculum planning was reviewed in light of the Rose Review (Alexander, 2010) and discussions took place to address the need and desire for 'creative and interactive programmes of study' which would enable the students to 'value their own culture, while showing respect for that of others' (Bangkok Patana , 2013b). With this in mind, a creative approach to curriculum planning started to be developed.

What is a Creative Curriculum?

Ross (2000) identifies several different definitions for curriculum. These include formal definitions of curriculum, such as a prescriptive National Curriculum which identifies content, and more informal definitions such as the 'hidden' curriculum which is unintended learning. In addition, Kelly (2009) recognises the difference between the planned curriculum and the received curriculum. He identifies a planned curriculum as that which is recorded in curriculum programmes and the received curriculum as the actual learning experience received by the student. This paper considers curriculum as the planned curriculum and that which is termed as *creative*. But what is a creative curriculum?

Defining a creative curriculum is not easy. Claxton (2006) identifies how some have viewed a creative curriculum as placing a higher regard for teaching the arts, and others for students to have more freedom of expression with their learning. Perhaps then, it is better to start with a definition of *creativity*. However, this also has proven to be a challenge. Such is the confusion that Claxton (2003) lists 12 definitions of what creativity *is not* before identifying what he terms as the 'Eight Is of Learning' which contribute to creativity, namely immersion, inquisitiveness, investigation, interaction, imagination, intuition, intellect and imitation. Robinson (2011) identifies creativity as being three related ideas: imagination, creativity and innovation, succinctly describing it as being 'imaginative activity fashioned so as to produce outcomes that are both original and of value,' (NACCCE, p.30). Quigley (2011) uses Robinson's definition of creativity as a basis for his definition of a creative curriculum, stating that it is one that 'has clear educational purpose, is delivered with imagination [and] has measurable educational value' (p.46). It is this definition of a creative curriculum which is used in the context of this assignment.

Why a Creative Curriculum?

Since the introduction of England's National Curriculum in 1989 there has been much concern about curriculum overload (Alexander, 2010; Oates, 2010; Ross, 2000). Even the revised primary National Curriculum introduced in 2000 has failed to decrease the pressure to move quickly through and check off curriculum content (Oates, 2010). Alexander (2010) recognises that English and Mathematics are the focus while other subjects are being crammed into remaining curriculum time. He argues that a broad and balanced curriculum, as advocated in the 1988 Act, is fundamental to achieving standards in 'the basics', citing DES and Ofsted findings as confirmation. Furthermore, he reasons that an overcrowded curriculum forces teachers to transmit knowledge and children to recall facts, rather than enabling children to engage in, explore, discuss, reflect on and evaluate their learning to deepen their understanding. England's new National Curriculum (DfE, 2013) to be implemented from September 2014, has done little to impact upon reducing the overload with its accelerated pace of learning in Mathematics, emphasis on scientific knowledge and prescriptive History content.

A creative curriculum seeks to solve many of these issues. Burgess (2007) identifies four common attributes of schools which foster a creative curriculum: child-centred learning, an emphasis on skills before content, 'a slow and organic approach…to consolidate learning and allow for depth' (p.17) and a curriculum that is 'flexible and dynamic and always open to change' (p.17). These four common attributes will now be given consideration.

Learning Theories and the Creative Curriculum

This part of the assignment relates educational theory to the four common attributes which Burgess has identified as integral to a creative curriculum. Particular reference will be made to the ideas of Rousseau, Dewey and Vygotsky along with relevant findings and recommendations from the Cambridge Review (Alexander, 2010).

Child-centred learning

Child-centred learning is a key attribute of a creative curriculum. It is advocated by progressive theorists and stems from the work of Rousseau. It contrasts with the traditional view that education should impart knowledge or society's values (Kelly, 2000). Rousseau, recognising that society can be corrupt and that freedom within society can be controlled, saw nature as the antithesis. His ideas about education reflect this view. He proposed that an education system be based on how a child learns naturally rather than a curriculum which has been formulated by an adult and constructed using society's cultural values (Ross, 2000).

Rousseau compared children's thought processes with those of adults and concluded that they were less formed. He recognised that the teacher must adapt to the child, giving consideration to the learning process (Ross, 2000). Ross identifies five positions on a process-driven curriculum in Rousseau's work: 'the child will develop naturally, given a suitable environment; the child's development is best self-directed; subject/discipline divisions are artificial; the role of the teacher is to enable learning, not to transmit knowledge; and the learning process should be organized for individuals, not class-sized groups' (2000, p.138). Whilst, the first four positions are prevalent in some form or another in all child-centred ideology, it is the last position concerning individualised learning which has been contested by successive progressives (Ross, 2000). Dewey promoted group-learning activities facilitated by the teacher who would participate in the group tasks with the children rather than organising and leading them. He identified learning as an experiential process in which children learn by doing. It is his words from which the term 'child-centred' originated: 'the child becomes the sun around which the appliances of education revolve; he is the centre about which they are organised,' (Dewey cited in Ross, 2000, p.137).

Rousseau's and Dewey's theories are built upon by Vygotsky, a constructivist theorist. Stemming from the progressive movement, constructivism considers how the social context for learning can support children through solving problems supported by adults or by more capable peers (Thirteen Ed Online, 2013). Vygotsky's zone of proximal development theory (ZPD), dependent upon social interaction and cultural customs, links development and learning. This zone is a measurement of the 'distance between the actual developmental level as determined by independent problem-solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers' (Vygotsky, cited in Alexander, 2010, p.94). Scott (2008) cites the work of Daniels who described four general versions of the ZPD: assessment, scaffolding, cultural and collectivist. Scaffolding alone will be discussed further due to its relevance to this paper.

The scaffolding version involves the teacher as expert constructing a scaffold for the child to support their learning needs when carrying out a task. The child then uses this scaffold to gain new knowledge. The scaffold bridges the gap between the teacher and the child thus narrowing the ZPD (Scott, 2008). Scott, citing Moll (1990), identifies that Vygotsky was not specific about the form of scaffolding that could be used and was not clear about whether the child could be involved in the process. Scott suggests that involving the child could be beneficial. He reasons that the child is best informed to identify their learning needs and, for the scaffolding to work, they should be engaged in the scaffolding process (Scott, 2008).

Skills over content

Whilst Burgess (2007) identifies skills over content as an attribute of a creative curriculum, Dewey's ideas were less about skills and more about experience. As he said: 'Not knowledge but self-realization is the goal' (Dewey, 1938, cited in Kelly, 2009, p.100). Dewey held that knowledge develops and evolves over time and the imposition of knowledge by teachers, parents and others in society is detrimental to its progress. Considering education to be a lifelong process, Dewey deemed that only those experiences which would lead to further experiences should be selected for curriculum content (Kelly, 2009). He called this the 'experiential continuum' (Dewey, 1938, cited in Kelly, 2009, p.108).

Other constructivists have advocated this value of experience over knowledge. Whitehead (1932, cited in Kelly, 2009) opposed a curriculum 'of knowledge to be acquired and facts stored' (p.100). Supporters have instead argued that children's individual needs and interests be considered (Wilson, 1971, cited in Kelly, 2009) along with their prior experiences (Kelly, 2009). The Plowden Report (cited in Alexander, 2010) promoted a child-centred approach in which the teacher responds to students' interests. However, others such as Peters and Stones (1969, 1971, cited in Ross, 2000) have contested this approach, viewing knowledge selection as 'too important to be left to the learner' (p.139).

In recent years, this altercation has changed. Skills have taken the place of experience in the discussion so that now the value of skills is compared with that of knowledge. The National Union of Teachers (NUT) (cited in Alexander, 2010) pointed out that the current curriculum is not providing children with the skills necessary to compete in a global market. In the same vein, The Association of Teachers and Lecturers (ATL) (cited in Alexander, 2010) supports 'a skills based curriculum focused on physical skills,… communication, interpersonal and intrapersonal skills, and… thinking and learning skills as well as academic skills' (p.249). Advocating a knowledge-based curriculum, Young (2013) argues that teachers are responsible for passing on knowledge to the next generation in order that this knowledge can be built upon. He claims that it is a student's entitlement to access knowledge and the curriculum should be based on this. Alexander (2010) recognises the fundamental place of both knowledge and skills in primary education and the need for care and consideration when planning a new curriculum to advance these.

Slow and organic approach to learning

Burgess (2007) identifies some key factors of a 'slow and organic approach' (p.17) which promotes deep learning: time to consolidate learning, decisions to give more focus to some areas of learning and reflection on outcomes.

Alexander (2010) advocates a flexible use of time which is blocked for learning within a domain. This promotes sustained learning, avoids a fragmented approach to teaching and alleviates the obligation for studying at a particular time. It allows time for ideas to be explored and themes investigated (Hayes, 2009). Exceptions to this methodology are where there is a need for regular rote learning and practice or 'surface learning' (Hayes, 2009, p.92). Alexander (2010) questions whether the national strategies daily literacy and mathematics lessons are the only way of achieving high standards as it is commonly understood that this has been detrimental to the rest of the curriculum.

Reflection was one of the modes of thought identified by Dewey in his concept of how we think (cited by Rodgers, 2002). He recognised reflection as a meaning-making process in which connections are made between experiences and prior experiences (Rodgers, 2002). Vygotsky (cited in Scott, 2008) identified that deep learning, like Dewey's view on reflection, is an active meaning-making process that cannot be conveyed through the traditionalist instructional methods and rote learning.

Flexible and dynamic curriculum
Burgess (2007) identified that schools with a creative curriculum are always 'open to change and modification' (p.17). New initiatives are approached positively and teachers are confident to adapt and change. This is despite the overloaded, prescriptive curriculum mentioned earlier. Substantiating this view, Alexander (2010) acknowledges how some schools and teachers go beyond these problems with a 'dynamism and independence of spirit…breaking free from the culture of dependence and compliance' (p.255).

It has already been mentioned above that Dewey identified knowledge to be evolving. With this in mind, Kelly (2009) suggests hesitancy in 'asserting value to any body of knowledge or its right to inclusion in the curriculum,' (p.36). He recognises that this view of knowledge as constantly changing should persuade us that knowledge should instead be connected to experience. Therefore, children should have experiences with which they can make sense of their world (Kelly, 2009). In addition, it is vital that more consideration be given to those subjects included in the curriculum so as to allow time and space for depth of learning. However, as Blenkin, Edwards & Kelly (1992) identify, it is difficult to remove subjects once they have become established. They cite Dewey's observation that 'no fortified and protected interest readily surrenders any monopoly it may possess' (Blenkin, Edwards & Kelly, 1992, p.22) and recognise that, as a result, some subjects remain in the curriculum because of political power rather than them being essential.

The Creative Curriculum at Bangkok Patana Primary School
This part of the paper will outline factors which influence the creative curriculum at Bangkok Patana in order to give context to the creative curriculum model developed. The Bangkok Patana model is then considered in light of Burgess's observations and the theories of Rousseau, Dewey and Vygotsky as described earlier.

The Bangkok Patana School Model
As an independent international school, Bangkok Patana is able to select and make its own curriculum choices, for the most part, without the restrictions of statutory government legislation.

There are three immediately identifiable differences between the Primary School curriculum at Bangkok Patana and a British primary school. The first is that at Bangkok Patana, Religious Education (RE) is not taught as a discrete subject, although religions are explored in the context of other curriculum areas. In England, RE has been a compulsory subject since the 1944 Education Act. The second is, in response to Thai government legislation, that all children receive some form of Thai language and culture development, differentiated for Thai nationals and non-Thai learners. In addition, Thai nationals are required to study in Thai for a further 80 minutes weekly. For Key Stage 2 students, this lesson is taught in place of a Modern Foreign Language (MFL). The third difference is the number of specialist lessons – that is, lessons taught by specialist teachers – that each child attends over a week. In Key Stage 2 children receive lessons in Information and Communication Technology (ICT), Physical Education (PE), Modern Foreign Language (MFL), Music, Thai Culture and a library lesson. All of these subjects, with the exception of some elements of ICT, are delivered as separate subjects in isolation from the rest of the curriculum. Each subject department has developed their own curriculum based on best practice identified in different curricula. This paper focuses on the planned curriculum in the regular classroom setting. Once specialist subject time and that given for pastoral care has been taken into account, it amounts to 70% of the timetable being available for class teachers to teach the remaining curriculum. This is Literacy, Mathematics, Science, History, Geography, Art, Design and Technology (DT) and Personal, Social and Health Education (PSHE) hereon collectively referred to as class-based subjects.

Referring to Alexander's (2010) recommendation that flexible use be made of time, it is clear that Bangkok Patana is working with a constricted time frame in which just over two thirds of the overall curriculum content (subjects) constitutes the creative curriculum. As a result, one of the challenges to curriculum design at Bangkok Patana is how to develop depth and breadth in eight subjects within a limited time frame. Consequently, it is these subjects which will be considered in the following part of the assignment.

Connected Learning

To tackle the challenge of limited time and allow for deeper learning experiences, Bangkok Patana follows a *connected learning* curriculum. Our connected learning model is based on recommendations in the Rose Review (2009) and the skills-based approach advocated by Quigley (2011). It promotes children's awareness of how they learn, it uses a cross-curricular, theme-based approach to develop understanding and apply learning from across subjects in different contexts, and it 'respects the integrity of subjects but lessens the rigidity of their boundaries,' (Rose, 2009, p.15). Quigley (2011) states that whilst the statutory curriculum is important, the subjects within it should not be the driving force. He identifies children's needs as the priority for determining curriculum content, along with community, school values and school location. He terms these as 'drivers' (p.46) of the curriculum. Whilst these are priorities, they do not set aside statutory curriculum requirements. Quigley's view is at odds with Dewey who prioritises development above needs, interests and growth (Kelly, 2009).

The Bangkok Patana connected learning curriculum to a great extent complies with progressive theory. At its heart, it is a child-centred curriculum. It provides opportunities for children to learn from real experiences in independent and collaborative contexts through a cross-curricular theme. The learning is steered through two or three driving questions asked at the start of, or at timely points throughout the theme. The children are guided towards answering these questions through planned learning experiences based on the children's prior knowledge and initial responses to questions. This approach equates with Dewey's experiential continuum (Kelly, 2009).

The Bangkok Patana learning experiences are usually of a collaborative nature and take place between children and between children and teacher, which relates to Vygotsky's constructivist work. As a result, language is key to thinking and learning development (Mercer, 2000 and Alexander, 2008, cited in Kelly 2013). Jarvis (2009, cited in Kelly, 2013) recognises cross-curricular learning to be beneficial as the language demands are connected. Kelly (2013) draws the conclusion that this is advantageous for learners of whom English is not their first language. At Bangkok Patana a large proportion of the students speak English as an Additional Language (EAL). Parents pay an EAL supplement for extra support and provision. EAL teachers and instructors are regularly in classrooms supporting learning and withdrawing identified individuals from across classes for extra support in a collaborative context. Agreeing an essential vocabulary for learning is made easier due to the connected learning approach which limits the range of vocabulary to be learned.

Learning themes at Bangkok Patana are for the most part built on real-life experiences or at least a manufactured reality. Studies of different times in History or of people and places in Geography are brought to life through drama and role-play. Children are drawn into the theme at the start with an engaging, memorable task, whether it is a group or individual challenge or practical activity. Children's prior learning is assessed and what follows is, to some extent, a series of inquiry-based tasks which support Dewey's beliefs in inquiry as an effective learning process (Thirteen Ed Online, 2013). Each task is built on a skills-based learning question which is the vehicle for teaching the knowledge and understanding. A skills ladder is used to support progression across the primary age range.

The creative curriculum at Bangkok Patana is continually evolving, in line with the views of Dewey and Kelly (Kelly, 2009). Whilst some themes stay the same from one year to the next, teachers use updated materials, knowledge and facts as they happen to keep the curriculum current. For example, when learning about volcanoes and their effects on landscapes and people, recent volcanic activity is used to supplement learning. Curriculum flexibility allows for themes to change in reaction to worldwide or national events, such as the Olympics or local flooding.

Literacy

The English curriculum at Bangkok Patana is supported by the National Strategies framework (National Archives Website). The progression documents, which set out expectations for genres from Year 1 to Year 6, are used to support vertical alignment across the Primary age range and aid planning. The four strands of the English National Curriculum – speaking and listening, drama, reading and writing – are taught for the most part in relation to the connected learning theme. Genres are selected which enable the children to use the knowledge gained across the curriculum in their writing. For example, when creating products to sell in their 'Business Matters' theme, Year 4 students learn how to write persuasive texts to advertise their product. Two aspects are taught discretely: spelling and reading. The discrete reading lesson is used to teach and practise specific reading skills, such as decoding, information retrieval and inference. Reading is also taught

through the connected learning theme where examples of the selected genre are read and analysed for organisational and language features.

The main approach for teaching writing uses *Talk for Writing* initiated by Pie Corbett and adopted by the National Strategies (DCSF, 2008). *Talk for writing* stems from the development of five key strategies: book-talk, writer-talk, story-telling and story-making, word and language games, and role-play and drama. The storytelling strategy is fundamental to the teaching of writing at Bangkok Patana, particularly narrative.

The storytelling strategy is used across the primary school and involves the children using a known story to create their own original stories. There are three stages to this strategy: *imitation, innovation* and *invention*. The first stage involves the children learning a story orally and retelling it. Visual and kinaesthetic prompts are used to aid memory in the form of a story 's' (see Appendix 1) and actions. With regular practice, the children's confidence in telling the story grows and they can retell the story in writing, imitating the original. During the second stage the children develop, extend or make changes to the story. In the final stage children create an original story. This process increases children's awareness of language patterns and sentence structures, often without direct teaching, enabling children to confidently use these in their own writing (DCSF, 2008). This strategy has proved so successful that it has now been adopted for teaching non-fiction genres. Here, whilst the process is the same, the visual prompt and children's planning approach is different. Rather than a story 's' to map the text, a 'boxed-up' method is used to structure the writing. The format for this is determined by the genre (Corbett & Strong, 2011).

The *Talk for Writing* strategy, although a relatively recent approach to teaching writing, reflects Vygotsky's ZPD theory. A story scaffold in the form of a visual and oral representation is introduced to the children. In line with Scott's (2008) recommendation for involving the child, the children create actions to further support memorisation. This story scaffold is referred to and practised regularly over several weeks to internalise the structure and patterns. Specific language and structures (whole text and sentence structures) identified in the story as being crucial to the children's next steps in writing development are made explicit and are used as a model for their own writing. In essence, the story scaffold enables the children to construct their own stories.

The teacher's role, as identified by Rousseau, is to enable learning. For the storytelling approach, this means considering crucial factors before and in addition to carrying out the process described above. Firstly, the choice of story needs to be considered. Is it appropriate to the age group? Is the story easily adaptable or can it be made easily adaptable for the children? At Bangkok Patana the storytelling approach is part of connected learning. Story themes or contexts are chosen to complement the cross-curricular theme. Scope for the children to innovate with the story is identified from the outset. Secondly, the children's next steps in writing are identified from formative assessments. Models of what these next steps look like are identified in the text and if not present are purposely written in. Without these prior considerations the strategy will have little impact upon children's writing progress.

Mathematics

The connected learning curriculum as a theme- and skills-based approach is effective at drawing together commonalities and highlighting connections across subjects. However, this approach is not inclusive of all class-based subjects. Mathematics, for the most part, is still taught as a discrete subject at Bangkok Patana. Where possible, connections are made with aspects of connected learning themes in order to enhance understanding, for example, handling data when conducting market research during the Business Matters theme and using measurement and scale when constructing bridges during the Building Bridges theme. This is in line with progressive theory and Dewey's position on experiential learning (Ross, 2000). Nevertheless, Mathematics is usually taught in isolation. It follows the National Primary Strategies framework and works in practice as it was intended: flexible enough to be integrated into the wider curriculum whilst also striving for excellence through a sequence of core knowledge, skills and understanding in discrete subject teaching (Alexander, 2010).

Limitations of the Bangkok Patana School Model

Although Mathematics and Literacy at Bangkok Patana have kept the core knowledge, skills and understanding outlined

in England's National Curriculum and related publications, it is questionable as to whether the connected learning curriculum is as successful. The aims of the Bangkok Patana model to connect knowledge, skills and understanding across the curriculum are achieved; however, whether or not it fulfils the aims of England's National Curriculum needs further exploration. The skills ladders are clear in expectation and are used to ensure progression across the primary age range. However, the skills-based model used gives little consideration to progression in knowledge and understanding. Quigley (2011) suggests a curriculum map which identifies the breadth of the curriculum across a key stage along with the programme of study: the essential knowledge, skills and understanding. The Bangkok Patana curriculum map identifies the skills only. It is the author's view that the lack of consideration to knowledge progression in subjects such as Science, History and Geography, is resulting in fragmented knowledge. Rose (2009) recognised when reviewing the National Curriculum that difficult decisions needed to be made regarding the knowledge, skills and understanding essential to the learners. At Bangkok Patana, a positive step forward would be to identify the core knowledge, skills and understanding essential to each Year group and across each key stage. Within this process the international student body towards whose educational development the creative curriculum is aimed should also be taken into account to ensure relevance.

By far the greatest limitation on the creative curriculum at Bangkok Patana is the timetable: its organisation and consequent impact. The non-class based lessons taught by specialists have protected curriculum time due to the timetable. As a result, class based subjects are limited to the spaces not taken by specialists. Due to the number of classes to be included (47 classes from Years 1 to 6) and the time set aside for Mathematics and Literacy, a workable timetable which promotes 'deep learning', identified as being key to a successful creative curriculum, proves challenging. Nevertheless, teachers are encouraged to use class-based curriculum time available to explore a question, concept or issue in depth rather than skimming over the surface to ensure coverage. Use of the planned driving questions is essential to ensure that the teaching remains focused and that intended learning takes place.

Conclusion

This paper has looked critically at the creative curriculum at Bangkok Patana Primary School. Starting with a description of the context for curriculum design at Bangkok Patana, it moved on to determine what makes a curriculum creative before then considering the rationale for a creative curriculum. It has examined how child-centredness, skills over content, opportunities for deep learning and a flexible curriculum are key attributes of a creative curriculum. Consideration has also been given to how progressive and constructivist theories support these ideals. Justifications for a creative curriculum at Bangkok Patana have been explained and the creative curriculum has been analysed to determine the extent to which it is successful.

The curriculum design works well at the moment but despite best intentions, a clear curriculum design and pedagogy, the creative curriculum at Bangkok Patana has its limitations of time and subject content. As it has been stated by the American Association for the Advancement of Science (AAAS): 'in developing a design that meets complex specifications, trade-offs inevitably have to be made' (2001, p.44). Compromises *have* been made but that should not stop Bangkok Patana from looking for better alternatives to time management and subject content which could impact upon student learning and achievement.

In considering the creative curriculum at Bangkok Patana alongside other creative approaches, this study has demonstrated that creative curriculum approaches are diverse. There is no one way of designing a creative curriculum. Perhaps this in some way relates to Robinson's (1999) definition of creativity considered earlier: creativity is 'imaginative activity fashioned so as to produce outcomes that are both original and of value' (p.30). A creative curriculum is therefore original by its very nature and the continually evolving curriculum at Bangkok Patana is a good example of this.

Bibliography

ALEXANDER, R., ARMSTRONG, M., FLUTTER, J., HARGREAVES, L., HARRISON, D., HARLEN, W., HART-LEY-BREWER, E., KERSHNER, R., MACBEATH, J., MAYALL, B., NORTHEN, S., PUGH, G., RICHARDS, C., UTTING, D. 2010 *Children, their World, their Education Final Report and Recommendations of the Cambridge Primary Review*, Routledge, UK.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE 2000. *Designs for Science Literacy*, [Online]. [Accessed 2 November 2013] Available from http://www.project2061.org/publications/designs/online/pdfs/designs/chapter1.pdf .

BLENKIN, G.M., EDWARDS, G., KELLY, A.V. 1992. *Change and the Curriculum*. London: Chapman.

BANGKOK PATANA SCHOOL 2013. *Overview of the Primary School* [online]. [Accessed 27 October 2013]. Available from www.patana.ac.th/primary.

BANGKOK PATANA SCHOOL 2013. *Key Stage 2 Curriculum Guide,* [online]. [Accessed 27 October 2013]. Available from http://www.patana.ac.th/ Documents/PageFlip/KS2/KS2%20Curriculum%20Guide/index.html?pageNumber=5.

BURGESS, T. 2007. *Lifting the Lid on the Creative Curriculum*. Nottingham: NCSL.

CLAXTON, G. 2003. *Creativity: A Guide for the Advanced Learner (and Teacher)* [online]. [Accessed 2 November 2013]. Available from http://www.guyclaxton.com/documents/New/AGuidefortheAdvancedLearner.pdf .

CLAXTON, G. 2006. Thinking at the edge: developing soft creativity. *Cambridge Journal of Education.* 36 (3), pp 351-362.

CORBETT, P., STRONG, J. 2011. *Talk for Writing Across the Curriculum: How to Teach Non-Fiction Writing 5-12 Years.* Maidenhead: Open University Press.

DCSF 2008. *Talk for Writing*, Nottingham: DCSF Publications.

DfE 2013. *The National Curriculum in England: Framework Document,* [Online]. [Accessed 27 October 2013]. Available from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/210969/NC_framework_document_-_FINAL.pdf .

DfES 2003. *Excellence and Enjoyment: a strategy for Primary Schools.* London: HMSO.

HAYES, D. 2009. *Encylopedia of Primary Education.* Oxon: Routledge.

KELLY, A.V. 2009. *The Curriculum: Theory and Practice*. Trowbridge: Sage.

KELLY, L., STEAD, D. 2013. *Enhancing Primary Science: Developing Effective Cross-Curricular Links*. Maidenhead: Open University Press.

NACCCE 1999. *All our Futures: creativity, culture and education*. London: DfEE.

NATIONAL STRATEGIES 2007. *Literacy Subject Area* [online]. [Accessed 21 November 2013].   Available from http://webarchive.nationalarchives.gov.uk/20110809101133/http://www.nsonline.org.uk/primary/literacysubjectarea.

OATES, T. 2010. *Could do better: Using international comparisons to refine the National Curriculum in England.* Cambridge: Cambridge Assessment.

QUIGLEY, C. 2011. Rules of Engagement. *Teach Primary.* 5 (1), pp 46-50.

ROBINSON, K. 2011. *Out of Our Minds.* Oxford: Capstone.

RODGERS, C. 2002. Defining Reflection: another look at John Dewey and reflective thinking. *Teachers College Record.* 104 (4), pp 842-866.

ROSE, J. 2009. *Independent Review of the Primary Curriculum: Final Report*, [Online]. [Accessed 2 November 2013]. Available from http://www.educationengland.org.uk/documents/pdfs/2009-IRPC-final-report.pdf .

ROSS, A. 2000. *Curriculum: Construction and Critique.* Oxon: Routledge.

SCOTT, D. 2008. *Critical Essays on Major Curriculum Theorists.* London: Routledge.

THIRTEEN ED ONLINE 2004. *Constructivism as a paradigm for teaching and learning* [online]. [Accessed 10 November 2013]. Available from http://www.thirteen.org/edonline/concept2class/constructivism/index.html.

YOUNG, M. 2013. Over-coming the crisis in curriculum theory: a knowledge-based approach. *Journal of Curriculum Studies.* 45 (2), pp 101-118.

Appendix 1

An example of a story 's', used as a memory prompt for retelling a story and as a model for planning children's own stories.
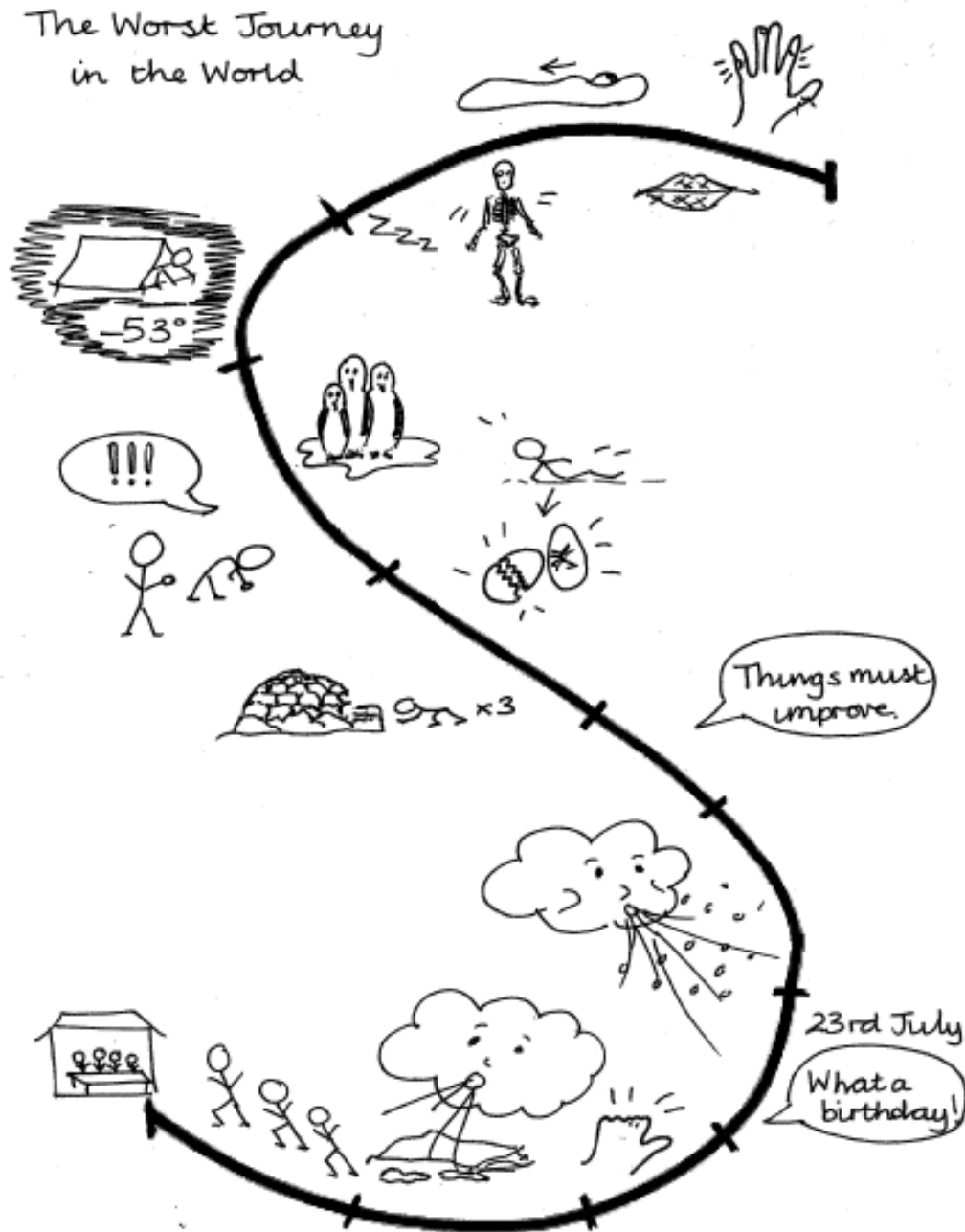
An example of a story 's', used as a memory prompt for retelling a story and as a model for planning children's own stories.

The Role of Automaticity in Orthographic-Motor Integration and its Effect on the Composition Skills of Young Writers

By Kate Penstone

Introduction

Currently within the UK, the teaching of handwriting carries a low status and profile, often seen only as a means to improve presentation, and has had little attention from mainstream educational researchers, policy makers and schools. Unfortunately, there is an assumption in our current pedagogic theory and practice, that handwriting becomes automatic very early on in children's writing development. In this untested assumption and the current focus on assessing writing style and neatness, we may be addressing the wrong aspects of handwriting that are crucial to writing success.
This article identifies a programme of research into handwriting, including studies within the domains of psychology, neuroscience and special needs education, suggesting the importance of handwriting in the teaching of literacy. Researchers are discovering that handwriting is more than just a motor skill and may make a crucial contribution to children's composing of text, as well as their overall success throughout school.

Recent developments in this field of study highlight the potential significance of handwriting to engaging the brain in learning and illustrate that learning to write by hand plays a key role in developing literacy. In an excerpt from Gwendolyn Bounds' article in the Wall Street Journal (2010) 'How Handwriting Trains the Brain: Forming letters is the key to Learning, Memory and Ideas', she describes how images of the brain illustrate that sequential finger movements activate massive regions involved in thinking, language and working memory. Furthermore, Marilyn Adams (1990: 55) asserts that handwriting aids in letter recognition and that 'solid familiarity with the visual shapes of individual letters is an absolute prerequisite for learning to read.' Heather Horn in The Atlantic Wire (2010) suggests that 'scientists are finally beginning to explore what writers have long suspected'. She notes a 1985 article in The Paris Review in which the interviewer asks novelist Robert Stone if he mostly types his manuscripts. His reply: 'Yes, until something becomes elusive. Then I write in longhand in order to be precise. On a word processor you can rush something that shouldn't be rushed, - you can lose nuance, richness, lucidity. The pen compels lucidity.'

In educational science there is scant interest in the ergonomics of reading and writing and its possible implications in the learning process. According to Mangen (2011), 'The sensorimotor component forms an integral part of training for beginners, but there is little awareness and understanding of the importance of handwriting to the learning process, beyond that of writing itself'. She refers to a pedagogical approach to writing, which has moved from a cognitive approach to a focus on contextual, social and cultural relations. In her view, an unequal focus on context, may lead to the neglect of the more subtle, individual, physiological and sensorimotor connections, that are vital in the translation from text generation to text transcription.

Background

While handwriting style was brought up-to-date in England during the late 1980s and early 1990s, its relative status and importance to other aspects of writing also changed. In Early Years education, evidence that children can write meaningful texts before they have mastered the writing system, changed the way in which teachers and researchers viewed children's early attempts at writing. 'Emergent writing' (Hall, 1987; Teale and Sulzby, 1986) placed the focus of attention on the meanings children were able to create in their writing. Analysis of children's early writing for evidence of understandings about spelling (Gentry, 1981), the language system (Clay, 1975) and audience (Czerniewska, 1992; Hall, 1987) put handwriting firmly in its place and moved attention away from earlier emphasis on copying, correct letter formation and neatness. According to Sulzby (1992: 291), '…the idea of linear, discrete stages prior to the onset of conventional literacy is flawed; instead, children appear to be building a repertoire of understandings with sociolinguistic properties.'

A genre-focused approach to writing popularised by the work of Wray and Lewis (1997), emphasised the direct teaching of the structures of socially-significant texts and was included in the requirements of the National Literacy Strategy (DfEE, 1998). Handwriting often figures prominently in descriptions of writing (e.g. United Kingdom Literacy Association & Primary National Strategy, 2004) but generally it has focused on transcription skills only. In pedagogical practice

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this has often meant that handwriting is seen not as part of the composing process, but as a presentation skill.

Development Matters (2012), the guidance material supporting practitioners in implementing the statutory requirements of the Early Years Foundation Stage, places handwriting not within the 'Literacy: Writing' area, but under the area of 'Physical Development: Moving and Handling', suggesting that the formation of letters is essentially a motor act that children will develop when they have mastered the sufficient fine motor skills. Within the current Primary Framework for Literacy (2006), the learning objectives show 12 strands of development, of which *Presentation* is the last of the 12 strands. Within this final strand, the learning objectives begin in the Foundation Stage with the requirement of pupils being 'able to use a pencil and hold it effectively to form recognisable letters mostly correctly'. In later years, primary children are then assessed on *'Presentation Objectives'* such as, Year 2: 'write legibly, using upper and lower case letters appropriately within words and observing correct spacing within and between words. Form and use the four basic handwriting joins', Year 5: 'adapt handwriting for specific purposes, for example printing, use of italics'. After Year 4: (write consistently with neat, legible and joined handwriting), there is no reference to children's handwriting other than adapting it for purpose or audience. It is assumed that most children will have developed an accurate, joined style by the end of Year 4. Interestingly, there is reference to students being able to type with increasing speed and accuracy but not the same criteria applied to the formation of letters, which make up the majority of the student's writing and composing. The Department of Education, in their Framework Documents, offer support to teachers with 'Pupil Writing Targets': "These focus on high value strands of objectives that make the greatest difference to improving writing attainment". They are:

Strand 7/8: Understanding and interpreting texts, Engaging and responding to texts
Strand 9: Creating and shaping texts
Strand 10: Text structure and organisation
Strand 11: Sentence structure and punctuation

As Berninger (2008: 18) posits, 'The artist needs a paintbrush in order to paint. Children need tools for producing letters to support their composing.' Graham (2010: 20) refers to dozens of studies in which researchers have found that, done well, early handwriting instruction improves both the *quality* and *quantity* of students' writing. He argues, 'Of all the knowledge and skills that are required to write, handwriting is the one that places the earliest constraints on writing development. If children cannot form letters, or cannot form them with reasonable legibility and speed – they cannot translate the language in their minds into written text. Struggling with handwriting can lead to a self-fulfilling prophecy in which students avoid writing, come to think of themselves as not being able to write, and fall further and further behind their peers … young writers must develop fluent, legible handwriting so they can focus on generating and organising ideas'.

Research Evidence
The composition-led view of the writing process is very much part of the mainstream culture of literacy teaching in England and has drawn attention away from handwriting, and with that, the role of automatic transcription skills have explicitly been given a peripheral role in writing success. However, substantial research in the last 15 years may offer insights into the role of handwriting in the composing process of mainstream children and may also ensure that the importance of handwriting is reconsidered.

Creating a model of the cognitive processes in writing, Hayes and Flowers (1980), studied the 'think aloud' protocols in skilled adult writers. There are three recurring cognitive processes within their model. These are: planning, translating and reviewing/revising. They identify sub-processes for the planning process; generating ideas, setting goals and organising the written output, and for the revising/reviewing process: read and edit. However, they do not identify sub-processes for the translating process. Based on cross-sectional studies of nearly 900 children, Berninger (1994) concludes that the cognitive processes of translation also has two separate component processes, that of transcription and text generation. They define text generation as 'the translation of ideas into language representations in memory' and transcription as 'the translation of those language representations into written words'.

McClutchen (1995) asserts that while children are able to switch from generating oral text in conversational speech to creating language fit for composition (such as storytelling), during text generation, they must embed new processes for hand-

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writing and spelling so that oral language can transform into written language.

In looking more closely at the processes required for successful text transcription, researchers have focused on the role of working memory in writing. Within the field of psychology, there is a well-established distinction between short and long-term memory. Short-term memory is a rapidly decaying store for incoming information from the environment, whilst long-term memory can store an almost unlimited amount of material over many years, making it an enduring storage system. Swanson and Berninger (1994, 1996) assert that, when describing a model of how composition develops, working memory needs to be considered explicitly alongside long-term memory and short-term memory.

Kellogg (1996, 2001) and Hayes (1996) assert that that working memory plays a central role within models of the writing process. They describe working memory as a temporary store for all the information necessary for carrying out the writing process. However, working memory is seen to be capacity limited, only holding a few items for a short time. Understanding how the different writing processes are accomplished using the same working memory space could explain how some writing processes may interfere with others.

Berninger (1999) conducted a cross-sectional study, in America, of 300 primary students, 300 intermediate students and 288 junior high students. They looked at the percent variance in compositional fluency (number of words written in time limits) and quality (based on content and organisation), accounted for by transcription (handwriting and spelling) and working memory at different developmental levels. There were two trends evident in the data. First, the contribution of transcription is larger than that of working memory during the elementary years. Second, the contribution of transcription shows developmental changes across the developmental period (elementary to junior high period), while the contribution of working memory is relatively stable. When looking at the rate of composing (compositional fluency), Berninger found that transcription is most important in the primary years, and thereafter contributes but in a decreasing linear fashion. For compositional quality (based on content and organisation) transcription show a curvilinear contribution and peaks in the intermediate years. Berninger (1999: 101) proposes that the relatively greater contribution of transcription processes (handwriting and spelling) exerts limits on the abilities of early writers to translate their ideas into written language. 'Low-level transcription and high level constructive processes must be orchestrated in real time during composing'. The degree to which transcription is automatised affects the temporal coordination process and the allocation of limited capacity resources'. Her final rationale is presented for directing writing instruction to: 'the simultaneous goals of: a) automaticity of low-level transcription and b) high-level construction of meaning for purposeful communication.'

Handwriting is not automatic for many young writers. Each time they are faced with writing a letter, they must recall from memory the shape and orientation of that letter in order to construct it. Focus on letter construction means that fewer attentional resources can be devoted to the meaning-making aspects of composing. Furthermore, children who are not taught to form their letters correctly, develop bad habits which are harder to change later on. This may impact on their ability to develop a joined style, thus negatively impacting on the fluency of their writing.

Orthographic-motor integration, (the ability to call to mind and write letter shapes), and vitally, the automaticity of this integration, is now seen by researchers to be of key importance in composing quality written texts. La Berge and Samuels (1974) define automaticity as having been achieved when a process can be effected swiftly, accurately and **without the need for conscious attention**. Following their research, Graham et al (1997) suggest that automatic letter writing is the single best predictor of length and quality of written composition in the primary years.

Research by Christensen and Jones (2000) in Australia, and Graham et al (1997) in America, suggest that automaticity of orthographic-motor integration accounts for more than 50 per cent of the variance in writing performance in children. In fact, this was put at 67 per cent for the 7-8 year old children in their study. While Berninger and Swanson (1994) argue that the influence of orthographic-motor intervention declines with age, there are suggestions that it continues to influence the writing of secondary school students (e.g. Christensen and Jones 2000). These studies suggest a very strong link between handwriting automaticity and composition.

In a more recent study, Medwell, Strand & Wray (2009) examined in more detail whether findings regarding orthographic-motor intervention can be generalised to the British context, where the extent of handwriting difficulty is un-

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known and the assumption has been made that by Year 6 handwriting is related to presentation and not to the composition process. The study's sample composed 198 Year 6 pupils from four primary schools in central England. The measurement of composition was taken from the Year 6 Standardised Assessment Tasks (SATs), consisting of a longer and shorter written piece, using task-specific criteria. There were three measures of handwriting:

> The first was a SAT measure of handwriting, using a sample from the longer written task, in which pupils were marked on their ability to produce a consistent, fluent, legible style with letters of the appropriate size and placement. (Fluency was defined as evidence of the effective joining of letters.) Speed of writing, or efficiency of letter generation, was not included.
> The second measure was that of handwriting speed, in which students were assessed on their ability to copy sentences that contained all of the letters of the alphabet.
> The third measure was defined as 'the alphabet task' and required students to write letters of the alphabet from memory, thus demonstrating their skills in orthographic-motor intervention.

The full correlation matrix showed the highest correlation between performance on the alphabet task (generating letter shapes from memory) and composition (r=.46). This is in comparison to the handwriting speed test (r=.32) or the SAT handwriting test (neatness and letter formation) (r=.34). In order to investigate the relationship between composition and the three different handwriting tests, a multiple regression analysis was conducted. Only scores on the alphabet task and SAT score for handwriting (neatness) were significant, demonstrating that pure handwriting speed played no part in predicting composition scores, after the other two handwriting scores were accounted for. Adding the neatness score (SAT handwriting test) to the regression, increased the multiple r to .56, explaining an additional ten percent of the variance in composition.

However, it was only a *correlation* that had been demonstrated rather than a *causal* role for the alphabet task and composition scores. The authors of the study pointed out that other factors may determine both automatic letter writing and composition scores. For example, a relationship between handwriting and reading attainment was demonstrated by Graham and Weintraub (1996) and a study by Jones and Christensen (1999) suggested that reading, as a measure of general literacy competence, underlies both high composition scores and high scores on automatic letter production. However, Medwell et al found that after controlling for reading and maths, there is still a strong relationship between automatic production of correctly formed letters and composition. This supports the idea that letter generation takes up working memory capacity, which is therefore not available for higher level composing tasks. Given the widespread assumption that handwriting is a presentation skill, it is a very important finding. Medwell et al (p. 341) argue that 'these findings support the suggestion that handwriting is indeed a language act, and that orthographic-motor integration, that is automatic letter production, is not only a very different measure to speed or neatness but is more significantly related to composition in this sample of English children'.

There is a wide range in evidence when attempting to estimate the proportion of children who may be experiencing handwriting difficulties. Graham and Weintraub (1996) estimate it is between 12-20 per cent of school aged children. Barnett et al (2006) suggest a figure as low as 5 per cent in South-East England. Most figures are based on teacher estimates or small surveys however, and must be viewed with caution. One problem for schools wishing to ascertain how many children lack automaticity in their handwriting skills is that current statutory assessments used do not assess handwriting efficiency and automaticity, only correct formation, relative size of letters and fluency of joins, as noted earlier.

Research does, however, suggest a strong gender effect in the proportion of children who may be experiencing difficulties. Boys are more likely to be identified as having handwriting problems than girls, e.g. Hamstra-Bletz and Blote (1993). The Medwell et al (2009) study demonstrated that boys are more likely to be in the very lowest category of performance in automatic letter generation but also that, compared to the Year 2 group of children, the gap between boys and girls is wider in Year 6. If boys are less likely to achieve the necessary automaticity at the expected age, it will inevitably interfere with their ability to compose. This suggests that intervention to improve automaticity may be beneficial to boy writers and that early intervention is desirable, especially at a time when improving boys' composition skills is a national priority in England.

Intervention

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If, indeed, it is true that a lack of automaticity in transcription skills can pose negative consequences for the development of children's skills in composition, it is important to know whether these difficulties can be prevented through intervention, and what method of intervention is the most effective.

As early intervention is seen to be key to avoiding problems later on, examining practice in the Early Years is essential. Within their document 'Gateway to Writing – Developing Handwriting' the authors refer to the *Practice Guidance for the Early Years Foundation Stage (pp61-62),* which describe the early learning goal for five-year olds: *'Use a pencil and hold it effectively to form recognisable letters, most of which are correctly formed'.* While placing an emphasis on children experiencing a multi-sensory approach to learning letter shapes, they also they offer guidance as to how handwriting practice should be linked into emergent/developmental writing: 'Ideally, children need to be supervised when they are practising handwriting until letter formation is secure – bad habits reinforced in the EYFS are difficult to eradicate later on'. The document also stresses the importance of continuity from EYFS through Key Stages 1 and 2 as vitally important. 'Not only should a school have an agreed style, but an agreed 'patter' for helping children to recall the required movement for each letter.' Joined-up writing is also encouraged in the Reception year: *'as soon as possible once children are secure in the movements of each letter'.* It is suggested that digraphs that are joined as one unit, reinforcing handwriting and phonics, using multi-sensory channels to reinforce both. They also suggest that teachers encourage children to use joined-up writing for practising some of the high-frequency words too, so that these words can be recognised as wholes, e.g. *the, was, me* etc.

Such practice is the first step towards gaining automaticity in children's letter writing. Neglect of these key skills will inevitably lead to children entering Year 1 not able to hold a pencil correctly and unsure how to form letters correctly. This will inevitably have a detrimental effect on their composing skills and, if not corrected on entry to Year 1, may lead to a lack of motivation and enjoyment with writing and poor habits developing, that will be more difficult to correct as time goes by. Wray, Medwell and Strand (2009) recommend handwriting lessons for pupils struggling the most at a young age, insisting it is 'not an issue that improves easily or spontaneously.'

Evidence from numerous studies illustrates how handwriting intervention programmes have a real impact on the composition skills of young writers. Explicit, brief, frequent instruction helps them to automatise the production of letters and retrieve letter shapes rapidly from memory, freeing up cognitive resources to attend to spelling, punctuation, choice of vocabulary, sentence structure as well as the 'big picture' of what they wish to convey through their writing.

In one study conducted by Christensen (2005), orthographic-motor intervention, reading and written expression were measured in 114 Year 2 children before and after an eight-week handwriting programme. Not surprisingly, the children who undertook the programme showed significant improvement in their handwriting but also, crucially, in their composing skills. Even when reading scores were controlled, more than half of the variance in scores on written expression was accounted for by automaticity in orthographic motor integration. However, if automaticity in letter-writing is the strongest predictor of composition skills in young writers then the nature of the alphabet task, as used by Medwell et al (2009), should be considered as an effective intervention method. Having children copy letters, words and sentences may not be as powerful as having them simply writing letters from memory.

Graham (2010) recommends that effective handwriting instruction should be taught in short sessions several times a week in the first few years of school, with 75 minutes per week devoted to its mastery. In the recent Department of Education paper, 'What is the Research Evidence on Writing?' (2012, p 12), presents a list of six approaches that have been found to be effective in the teaching of writing by research reviews of international evidence (What Works Clearing House 2012; Gillespie and Graham 2010; Santangelo and Olinghouse 2009). The third of these approaches is 'Teach children to become fluent with handwriting, spelling, sentence construction, typing and word processing'. They go on to recommend: 'teach young pupils how to hold a pencil correctly and form letters fluently and efficiently'. This advice may be early evidence that, in 2012, the profile and importance of handwriting is being addressed, and perhaps even prioritised, as a useful tool in the writing process, compared to previous descriptions of handwriting as a presentation skill.

Medwell et al (2009) suggest that establishing some benchmarking for handwriting skills (especially automaticity of orthographic-motor integration) would be the first step towards identifying children with handwriting difficulties, who might

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benefit from interventions. Further information regarding teachers' expectations or targets for handwriting, or norms for children in the UK population, not only for orthographic-motor integration but also for handwriting neatness and speed, would be of assistance to teachers and researchers in deciding which children might benefit from handwriting intervention. More research is also required into the most effective intervention programmes to improve students' automatic letter writing skills.

Conclusion

The necessity for automaticity in our recent handwriting pedagogy has been neglected due to the focus on presentation and neatness. It is no bad thing that educators have prioritised children writing for different purposes within a contextual (text-level) approach, but in doing so have undervalued a skill that makes a strong contribution to the composing we so value. It is time for the recent research findings in this area to be made more accessible to educators and for it to be considered in the planning of future pedagogies. This will be of benefit for all children as writers, especially for those whose lack of automaticity in letter writing is preventing them from achieving the lucidity they desire in their composition. As Steve Graham (2010) explains, 'Difficulty mastering handwriting does not mean the game is lost, it just means writing is more challenging.'

Bibliography

ADAMS, M.J. *Beginning to Read: Thinking and Learning About Print – A Summary* (Champaign, IL: University of Illinois at Urbana- Champaign, 1990), 55.

BARNETT, A., HENDERSON. S. and SCHEIB, B. (2006) *Handwriting Policy and Practice in English Primary Schools.* London: Institute of Education Publications.

BERNINGER, V. (2008) Writing Problems in Developmental Dyslexia: Under-Recognized and Under-Treated. *Journal of Psychology, Vol 46,* pp 1-21.

BERNINGER, V.W. and SWANSON, H.L (1994). Modifying Hayes and Flower's model of skilled writing to explain beginning and developing writing. In E.C. Butterfield (Ed.), *Children's Writing: Toward a process theory of the development of skilled writing* (pp.57-81). Hampton Hill: JAI Press.

BERNINGER, (1999), Coordinating Transcription and Text Generation in Working Memory during Composing: Automatic and Constructive Processes. *Learning Disability Quarterly, vol. 22, No. 2* (Spring, 1999), pp. 99-112. BOUNDS, G. *How Handwriting Trains the Brain: Forming Letters is Key to Learning, Memory, Ideas.* The Wall Street Journal. October 5, 2010.

CHRISTENSEN, C.A. and JONES, D (2000). Handwriting: an underestimated skill in the development of written language. *Handwriting Today, 2,* pp.56-69.

CHRISTENSEN, C.A (2005). The role of orthographic-motor integration in the production of creative and well-structured written texts. *Educational Psychology, 25*, 441-453

CLAY, M. (1975) *What did I write?* Portsmouth, NH: Heinemann.

CZERNIEWSKA, P. (1992) *Learning about Writing.* Oxford: Blackwell.

DEPARTMENT FOR EDUCATION (2012) Development Matters, *Statutory Framework for the Early Years Foundation Stage.* Runcorn: Department for Education.

DEPARTMENT FOR EDUCATION AND SKILLS (2006) Primary Framework for literacy and mathematics. DfES 02011-2006BOK-EN.

Kate Penstone

A The Role of Automaticity in Orthographic-Motor Integration and its Effect on the Composition Skills of Young Writers

DEPARTMENT FOR EDUCATION (2012) *What is the research evidence on writing? Research Report DFE-RR238* https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/183399/DFE-RR238.pdf.

GENTRY, J.R. (1981) Learning to spell developmentally. *The reading teacher, 34.4. pp. 378-381*
GILLESPIE, A. and GRAHAM, S. (2010) Evidence based practices for teaching writing. *John Hopkins University School of Education: New Horizon for Learning.*

GRAHAM, S., & WEINTRAUB, N. (1996). A review of handwriting research: Progress and prospects from 1980-1994. *Educational Psychology Review, 8,* 7-87.

GRAHAM, S, BERNINGER, V., ABBOTT, R, ABBOTT, S. and WHITTAKER, D. (1997). The role of mechanics in composing of elementary school students; a new methodological approach. *Journal of Educational Psychology, 82,* pp. 781-91.

GRAHAM, S. (2010) Want to Improve Children's Writing? Don't Neglect Their Handwriting. American Educator, Winter 2009-2010, pp.20.

HALL, N. (1987) *The Emergence of Literacy. Sevenoaks: Hodder and Stoughton.*

HAMSTRA-BLETZ, L. and BLOTE, A. (1993) A longitudinal study on dysgraphic handwriting in primary school. Journal of Learning Disability, 26, 689-699.

HAYES, J.R. (1996) 'A new model of cognition and affect in writing' in C. Levy and S. Ransdell (Eds.). The Science of Writing. Hillsdale, NJ: Erlbaum, pp. 1-30.

HORN, H. *Writing By Hand Helps the Brain.* The Wire, AFP/Reuters, October 5, 2010.

JONES, D. and CHRISTENSEN, C. (1999). The relationship between automaticity in handwriting and students' ability to generate written text. *Journal of Educational Psychology, 91*, 44-49.

KELLOGG, R.T. (1996) 'A Model of Working Memory in Writing' in C. Levy and S. Ransdell, (Eds.) *The Science of Writing: Theories, Methods, Individual Differences, and Applications.* Mahwah, NJ: Lawrence Erlbaum, pp. 57-71.

KELLOGG, R.T. (2001) Competition for working memory among writing processes. *American Journal of Psychology, 114*, pp. 175-191Literacy Strategy (DfEE, 1998)

MANGEN, A. (2011) The University of Stavanger. *Better learning through handwriting.* Science Daily, 24 January 2011. <www.sciencedaily.com/releases/2011/01/110119095458.htm>.

McCLUTCHEN, D. (1995). Cognitive processes in children's writing: Developmental and individual differences. *Issues in Education, Contributions from Educational Psychology, 1*, 123-160.

McCLUTCHEN, D. (1995). Cognitive processes in children's writing: Developmental and individual differences. *Issues in Education, Contributions from Educational Psychology, 1*, 123-160.

MEDWELL, J. STRAND, S and WRAY, D. (2009). The links between handwriting and composing for Y6 children. *Cambridge Journal of Education, Vol. 39,* 329-344.

MEDWELL, D. and WRAY, J. (2008) *Handwriting - a forgotten language skill?* Language and Education, Vol.22 (No.1). pp. 34-47. ISSN 0950-0782.

Kate Penstone

*A The Role of Automaticity in Orthographic-Motor
Integration and its Effect on the
Composition Skills of Young Writers*

SANTANGELO, T. and OLINGHOUSE, N. (2009) Effective writing instruction for students who have writing difficulties. Focus on exceptional children.

SULZBY, E. (1992) *Research Directions: Transitions from Emergent to Conventional Writing.* Language Arts. Vol. 69, No. 4. (pp.290-297)

SWANSON, H.L. and BERNINGER, V. (1994). Working memory as a source of individual differences in children's writing. In E. Butterfield (Ed.), *Children's writing: Toward a process theory of development of skilled writing* (pp. 31-56). Greenwich, CT: JAI Press.

SWANSON, H.L. and BERNINGER, V. (1996). Individual differences in children's working memory and writing skill. *Journal of Experimental Child Psychology, 63*, 358-385

TEALE, W.H and SULZBY, E, (Eds) (1986) *Emergent Literacy: Writing and Reading.* Norwood, NJ: Ablex United Kingdom Literacy Association, & Primary National Strategy. (2004). *Raising boys' achievements in writing.* Royston: UKLA

What Works Clearing House (2012) *Teaching Elementary School Students to be effective writers.* WRAY, D and LEWIS, M. (1997) *Extending Literacy. London: Routledge.*

Kate Penstone

A The Role of Automaticity in Orthographic-Motor Integration and its Effect on the Composition Skills of Young Writers