

CHAPTER 2 - RESEARCH & REVIEW OF LITERATURE

2.1 Introduction

A paragraph on published works in the area of "Subject area".

2.1 The current curriculum of early years learners

Early years learning in the United Kingdom follows the Education Reform Act of 1988. The act mapped out for the first time a National Curriculum for England and Wales in general. The curriculum introduced the widespread restructuring of the education system designed to raise standards in schools by offering a structured and varied learning curriculum (18).

Much of the early learning education is based wholly on the individual needs and hobbies of the children and the individual differences that can be formed. Dewey (19) stressed that individuality with the curriculum that was chosen by the child rather than the teacher presented better results as each child presented better skills in different areas and that strict curriculums would favour certain students over others and supported the view that children learned best by investigating and manipulating the environments, in turn, self-motivating children to learn rather than the previous ridged and decentralised curriculums (19).

This leads us to a curriculum that focusses on learning by play with the teacher in very early years being more a facilitator and creator of an environment where early learners are encouraged to play and motivate themselves to learn with the materials provided which is more evident in key stage 1 (10).

The desired goals and aims for early learning were further set out in 1999 for key stages 1 and 2 where the "Foundation Stage of learning defined as from three years old until six years have six key development stages (20).

These stages are as follows:

1. Personal, social, and emotional development
2. Communication, language, and literacy
3. Mathematical development
4. Knowledge and understanding of the world
5. Physical development
6. Creative development

Each stage of the curriculum are designed to open early learners about the world around them outside of the family at home and begins to teach them to interact with other people around them and the very basics of academia (20). Children

Stage one is designed to develop the early learners' interpersonal skills without the influence of the family home and what is expected of them behaviourally when interacting with other early learners. Confidence is one of the most highly valued traits by parents that want to see their children develop

from an early age, the ability to speak and interact well with others from an early age gives parents the first indication that the development is moving on as normal with children (30).

A severe lack in this area of development can impact a student's behavioural and academic performance for a number of years and in some cases throughout the whole education process. Typical behavioural issues such as aggressiveness, disruptive behaviour and a lack of cooperation in students. Encouraging behaviour in this area is related to positive school achievement and future and are effectively set the stage for future academic and work-related skills and success (31).

Stage two teaches the foundations and groundings of basic communication including speaking, reading (using phonics) and letter formation. Whilst young learners learn to speak and communicate from their parents firstly and then formally in school, giving them the efficient tools to build on stage one and build the confidence to communicate effectively (20). This stage along with stages three and four is one of the most formative and effective years for effective parental collaboration as it sets the tone for students for the rest of the education process. Encouraging young students to also study at home and involve parents in the education process.

Stage three encourages the learning of small numbers and basic arithmetic. This area teaches young students to possibly for the first time to think logically and to develop simple spatial intelligence. This area, in particular, is possibly one of the more important areas in recent years given the rise in the science, technology, engineering and mathematics (STEM) subjects over the last twenty years. Mathematical reasoning and spatial awareness will potentially play a big role in many students' future career paths especially with the dominance of computers in many if not all jobs. Memory and attention to detail in this area are key and children with low attributes in both these areas are at risk of learning difficulties if these cognitive areas are not managed and developed well (33).

One of the key benefits to the first three stages above is the development of the episodic memory in young children that create good memory structures for learning and future development. Reese (32) found that parents who engage in a more elaborative style of conversation have children with more detailed and organised memories. This style of conversation can be described as augmenting information and then evaluating it which is often seen in high functioning young children (32). Short term memory recall is often called working memory and this working memory can be better developed by parents and educators both using a more elaborate style of conversation both in school and at home.

Stage four like the title suggests tries to open the eyes of young learners to a bigger world around them with different cultures and religions. This area specifically revolves around the understanding of everyday life, family life both at home and abroad, the environment and the communities the students live in. This area of education is achieved by play experiences like walks, day trips and exploration to stimulate interests and encourage children to engage in their own awareness and beliefs (34).

Stages five relates to the development of the student's body including control and coordination. This area is specifically designed to improve not only large movements but also fine manipulative and motor neuron skills but also to build on spatial awareness and balance. Recently included in this area as part of the curriculum are both knowledge and understanding of healthy living and good physical wellbeing. In this area, children are given the opportunity to work alone and as part of a team, are given time to perform and consolidate their skills and make the cognitive connections between the skills needed between indoor and outdoor activities and fine motor skills (35).

Stage six is designed to grow students creatively. In this area, children are encouraged to express their own personal style and imagination. This should be achieved by using a range of materials and activities including music, dance, art and crafts. The most important part of this area of learning should be the active encouragement and freedom of expression and self-awareness in forms such as role play, poetry, sculpture and developing empathy with others (18,20,36).

2.2 Current learning stages

All early year's students follow the three key stages of learning (9,20). These key stages form the basis of the curriculum in which all young students must follow in England, Wales and the Republic of Ireland in the United Kingdom as set by the government in state schools (9). The curriculum and key stages were implemented in part to set a standardised form of education across all students in state schools, allowing students to form a rounded education in all core subjects. It is worth noting here that private and public schools are able to design their own curriculum and are free to set out there on own term times and teaching methods (21).

The current system has since 1989 has adopted the teaching to test methodology of education and much of the curriculum is built on this in the form of key stages 1,2 and 3. During Key Stage 1, early learners focus on learning by play with the days largely broken up to provide early learners with an opportunity to learn in an expressive and purposeful environment where the students are taught basic, English, Mathematics and Science interjected by play, the style of learning is largely dictated by the school and the teachers within in it (10).

The statutory requirements of Key stage 1, which features children aged one to six years old are that students should be taught to be able to apply phonic knowledge and skills to be able to decode words accordingly, respond accordingly and speedily with forty plus phonemes, read common exception words, read words with more than one syllable, read words with contradictions read books that are consistent to build up fluency and confidence and word reading (11).

Students should also be encouraged to develop pleasure in reading, motivation to read and gain an understanding of vocabulary. This is designed to be achieved by listening and discussing a wide range of materials, bring their own experiences into their storytelling and learning to recognise and appreciate rhymes and poems and discuss words meanings (9,11). During this comprehension stage, they are also taught to gain an understanding of books and discuss and perform very basic analysis and evaluation of the material the students are studying and perform basic letter formation and sentence formation including very basic punctuation.

Mathematically at stage 1, the main focus is to teach and develop the student's confidence and intellectual ability with whole number, counting and place value. At this level, students should be with the four main operators, numerals and also words. Students should be able to develop the ability to distinguish, compare and describe shapes and quantities including measurements, weight and currency using the appropriate language. Moving towards the later part of key stage 1 should have the ability to recite the number bonds up to twenty and have a good grasp of place value and mathematical vocabulary (10,11).

During stage 1 there is a year one screening check where the students are required to take their first set of tests. These tests include a forty-word phonics screening check to assess whether further help will be needed with English reading and English grammar punctuations and spelling. There is also a maths test that should test the bonds up to twenty and basic knowledge of the four main operators.

Key Stage 2 learners follow the more traditional route of learning in which they spend most of the day in classrooms learning core subjects in a more methodical and traditional way. During both Key

Stages, 1 and 2 students are expected to learn English, Mathematics, Science, Design Technology, History, Geography, Art and Design, Music, Physical Education (PE) including swimming, Computing, and Religious Education (11,12). Only once students start Key Stage 2 do they start Ancient and Modern Foreign Languages (Unless in a bilingual school).

Key Stage 2 students should be reading at an age-appropriate level with the ability to read accurately and at a speed that is adequate for to both focus and understand what they are reading rather than just breaking down individual words. At this stage, they should be seen to developing their vocabulary and enjoy the materials they are reading.

Pupils should be able to write down their ideas with a certain degree of precision and acceptable punctuation. At this stage, teachers should be enhancing students writing skills as they develop their skills. The spelling of common words should almost always be correct, and phonics should be applied to spell the less common words, most pupils will not need any more help in terms of learning to read as the difficulty of books increases with their vocabulary (9,11).

In terms of mathematics, pupils should at this stage be able to demonstrate the ability to solve multiple ranges of problems including fractions and decimal place values. Teaching now ensures students develop mathematical reasoning and should be able to analyse shapes and their properties with a high degree of accuracy.

By the end of Key Stage 2, students should by now memorised multiplication tables up to 12 and show accuracy and confidence. Students should be able to spell and read mathematical vocabulary both correctly and accurately using their ever growing knowledge and range (11).

Key Stage 3 learners follow the same subjects as Key Stage 2 but at a far more advanced level as they may be previously used to but are now taught sex education unless the parents or guardians decide they would like the students removed from these lessons (10,11).

2.3 Parental Collaboration

The problem in the United Kingdom (UK) is the current education system does not focus on parental and educational collaborative involvement and only has to offer feedback about students once a year unless the students are sitting SAT exams and returning results that parents and guardians will see (17). The current regulations stipulate that an official school report and parents/progress evening as stated in the Education (Pupil Information) (England) Regulations of 2005 must be held to offer feedback to parents (8).

Whilst this system has been the norm in the UK for many years, technological advancements can now offer the education system a better solution for the continued progress and development of children between the ages of 5 and 12 (in this statement we refer to children of these ages as 'early years' learners as per the Elementary Education Act of 1870) (1).

The Effective Provision of Pre School Education Project (6,7) found that when children had parental support in terms of involvement of 'Home School Life' had improved levels of conformity and cooperation, better peer confidence and sociability and lower rates of anti-social behaviour. One of the glaring facts from that study was that early learners were shown to have a clear rise in cognitive development scores when they had additional support and home-schooling in addition to their existing schooling at state schools (7).

Whilst early learners have a clear and systematic curriculum for their development during these most formative years for both educational and personal development, every student reacts differently and develops at different speeds. This highlights the importance of parental involvement in early learning environments to reinforce good practices and allow for positive performance increases in terms of both academic and behavioural performance.

There are studies showing clear benefits for parental involvement in early learning environments. A survey conducted on behalf of the Department for Education and Skills (DfES) found that 72% of parents agreed they wanted more involvement in their child's school life and better feedback (5). The ability to have on-demand information about a student's performance and behaviour can give parents and guardians the ability to rectify any developmental issues as quickly as they arise rather than once a year at parents evening or when the yearly report is produced.

Izzo et al. (23) found that with between one and eleven additional interactions between teachers and parents there was a 14-38% variation in performance elevation in year one to three students aged 5-8 years old (23). This was in stark contrast to just 1-6% variation in performance with zero parental interactions apart from the standard one parental evening meeting in the United States which very similar to the UK education system in that respect (23).

Multiple bodies of research have been completed in this area that suggests when teachers and parents collaborate effectively. Students are more likely to perform at a higher level in school both academically and behaviourally (24,25). This has seen a policy shift in the UK that has seen the best practice reviews sent to all schools in the to actively encourage the enhancement of parent governor roles, the involvement parents in the inspection process, the provision or annual reports and prospectus the requirement for home-school agreements and finally, the provision of increasing amounts of information about the curriculum and the school performances (26,27).

This report was based on the work of Desforges et al (27) who found that parental collaboration in terms of help with homework at a minimum offered some improvement but felt that parents never had enough feedback in terms of homework results once their children had submitted it. This was not always the case though as it varied from school to school leading us on to social class (27).

Social class is another huge factor in effective parental collaboration Desforges et al (27) noted that middle-class children were more in favour of parental inclusion than the children from working-class families. Edwards and Alldred (28) pointed out that working-class children were more active in the control over parental inclusion in their education and in some cases actively worked to limit it. Many children in the later stages of primary school and secondary school felt that parental involvement laid with the parents themselves to initiate rather than themselves.

One big barrier that was common across many of the studies concluded that the biggest limiting factor in parental collaboration was the parents own constraints especially in working-class families where time was the major limiting factor to interacting with teachers and helping with homework (27). This would open the avenue to a system that would allow working-class parents at the very least to overcome the time limitation improving parental collaboration by using a computerised system for collaboration.

Nechyba et al (28) synthesised that there were three probable mechanisms which parental collaboration may be affected by social class. The first possible mechanism is the so-called 'culture of poverty' in which families with a working-class background place less significance on education than middle-class parents and are less likely to contribute. The second theory is that middle-class families have a higher social status in terms of networking and social skills, unlike working-class families. This

can lead to working-class families feeling they are not equipped to negotiate and deliver with the schooling demands put forth by teachers. Finally, the third proposed mechanism implies that there are institutional barriers that indicate schools accept parental collaboration only on their own terms and the families that do not conform are in effect brushed off which has been noted by past experiences.

As previously discussed, the ability to provide parents with regular reporting on early learner's performance and behaviour allows for tailored and systematic home-schooling that would help teachers, students and parents/guardians collaborate to improve the overall performance of young learners.

The barriers that are put in place by social status and institutionalisation can be overcome by technology. Parental collaboration has been proven to be the UK much like the rest of the world has now transitioned to a state of continual access to an internet connection via either a mobile smartphone, tablet or fixed terminal like a desktop for example. This allows for both the education system and parents to potentially have more collaborative involvement in the students' academic and behavioural performance during the early year's stage of education that is not currently being utilised in state schools.

2.4 Avenues of Communication

Communication between teachers and parents can take a number of different forms and techniques. Expressed communication can involve one- or two-way communication exchanges. One-way communication happens when teachers aim to update parents about upcoming activities, events or student progress. The first instance would be a letter or memo at the start of the school year introducing themselves, other ways include newsletters, social media platforms, text messages and report cards (37).

Written communication is still one of the most popular and efficient ways to provide valuable and useful information between school and home. It is a product that aims to collate information about the students and school life that parents will read and understand. Many schools send newsletters out that consistently describe the teaching strategy and content the students will be learning each term as a way of encouraging parents to collaborate and engage with children regarding the content they will be learning and experiencing.

Another method used in one-way communication are report cards and the current reporting system in UK state schools is set by the government. The guidelines set by the government states the following, schools must send a written report to parents on their child's progress for the school year by the end of each summer term (12). The minimum information contained in the reports must contain the student's general progress, brief particulars of achievements, highlighting strengths and developmental needs, how to arrange a discussion about the report with a teacher at the school and the student's attendance record (12).

This can be considered as the most traditional method of parental collaboration; report cards should provide an analysis of the students overall academic development of the course the school year. Detailed in the report should be a breakdown of development in all the content areas taught plus the students social and behavioural performance (37).

The advantage of school reports/cards is that parents receive an overview of their child's performance for the year on overall student performance, there is little information on how teachers should write reports and many teachers are recommended to use the keywords and phrases offered by the Education union (13). Due to the extreme time constraints, teachers face

when having to write these reports at the end of the school year many teachers and schools now use computerised report banks that standardise report writing and speeds up this process.

The major disadvantage with this reporting method is that it is only provided once an academic school year. This does not allow for changes to be made to rectify academic and behavioural problems as they occur, this, in turn, can allow problems to manifest and bad habits to develop in students' overall performance.

One popular tool that teachers are now making use of report banks, this tool is used to formulate reports based on a set a number of choices based on the performance and behaviour of the students. This system involves using working through each section of the report and selecting answers from multiple choice selections.

Many schools and teachers have now resorted to using report card comment banks to speed up the reporting process at the end of the school year. This process is streamlined from traditional report writing by selecting relevant comments through multiple choice selections (12,37).

In the UK, parents are offered the chance to communicate their responses sometimes by way of return slip or learning journal but more often than not, it is at a parent-teacher evening that the parents get the first chance many parents get to engage in two-way communication.

Two-way communication takes place when teachers and parents engage in meaningful and productive dialogue. In many cases outside of the traditional parent-teacher evening, contact by telephone is made to praise a student's outstanding academic or sporting achievements but in many cases, the contact is made for negative purposes such as behavioural issues or a concern for a child's academic performance (38). This negative contact can cause tension and ill feeling between teachers and parents, teachers should strive to make these contacts a positive as possible to create a feeling of collaboration or teamwork. To create positive engagement a willing collaboration must be gained to ensure the best chance of success (37,38).

The most common way that is used for as previously mentioned is parent-teacher evenings where the time given isn't representative to the time taught over the period of a school year. Another issue with this is that parent-teacher evenings are usually held at the end of the school year where there is little to no chance to remedy any issues found during the school year (38). To be successful these meetings need to be well thought out, planned and offer some solution to improving students' academic and behavioural issues over the 6-8 weeks' summer holiday period to be successful. Again this is only successful if both parties work collaboratively for the good of the student.

In private and state schools meeting between parents and teachers are far more frequent with the social dynamics shifting in favour of the parents in many cases due to the perceived relationship and way admissions work. Parents are paying schools for education and in turn, expect the best service for that custom (39). In state schools, it is free and the perceived expectations drop due to many in state schools being in a situation of disadvantage both economically and socially compared to their private and public school counterparts.

During my literature review, I found that private and public schools had far better reporting and student support systems in place that in many cases replaced the need for overall yearly reports in the traditional sense. They had continued support from teachers and the head of houses who were responsible for the performance of the students. Teachers completed weekly or daily reports that the "head of the house" could action and work on with the students to continually improve performance.

Private and Public schools due to the fact they privately funded, allow for smaller class sizes and more direct collaboration between parents, teachers or head of years. Private and public schools especially where the children may be in boarding school use weekly reports for parents to include them as much as possible in the education of the students. This clear difference in collaboration does highlight the difference in academic results between independent and state schools (40). Trying to bridge the gap in results may not be completely bridged by more effective collaboration but as highlighted, previous studies have shown a clear improvement in results when successful collaboration is applied (27).

2.5 Technology in Educational Parental Collaboration

Alongside two-way communication, the advent of technology has allowed for quicker and easier means of contacting parents through email and social media platforms but does not address to the core issue of being able to engage in meaningful dialect about the students' performance or study plan during the school year.

Whilst teachers do use technology like report banks to make the job of writing yearly reports faster, the pre-composed comments can feel both generic and unspecific since the comments aren't original. Many teachers report also copying reports for students with similar performance meaning that parents do not always get the interaction they demand or require.

Many teachers in state education state they just don't have the time to meet with the parents of thirty plus students per class on a regular basis. When parents do try to engage with parents the communications are brief. Making time to engage with parents in a meaningful way can be exploited by technology but no system seems to tick all the boxes with teachers (41,42).

As highlighted in the recent Department of Education Publication (42), the growing stress and burden teachers face in meeting teaching demands and writing of lengthy reports is just not meeting expectations of the schools or the government and the use of technology similar to many of the reporting applications are now being investigated as to a viable option (42). This leaves the door open for independent developers and software houses to meet the ever-growing demands to fulfil this ever-demanding area.

2.6 Conclusion

To conclude the literature review, it is clear there are gaping holes in terms of the quality and timing of reports in the UK state and private school systems. It is also clear that parents are ever more demanding for quality schooling and parental collaboration in terms of their child's education. The current curriculum is diverse and offers students an excellent education should they embrace it. It is also quite clear that it will take the efforts of both schools and the parents collaborating successfully to bridge the gap between the private and state system.

Multiple studies and investigations have shown categorically that even the most basic of parental collaboration above the standard one per year mandated progress evenings yields more success both academically and behaviorally. It is even more evident when this habit is started at a young age where students can see that both the schools and parents are actively engaged in working together to make them successful.

The studies also found that parents want more parental collaboration and that the one progress report per year was just ineffective. The current system allowed bad habits to manifest before they were aware or had to the chance to rectify them. The more meaningful feedback the parents could obtain, the better the chance of both academic and behavioural progress and success for students.

The perceived divide in social class is one of the largest mitigating factors in successful parental collaboration this is compounded by the institutionalisation of the state school system and its entrenched attitude to the working-class parents. In private schools, this is almost never the case since the attitude is of that the students and parents are paying customers and should be treated as such. As with any business the customer is always right, and this is highlighted by the high level of feedback parents receive from private schools. With the introduction of a suitable software system, it is clear that the level of achievement would grow giving disadvantaged students a far better chance of success.

One of the biggest barriers for working-class students in state schools is that one or both parents work. This makes attending and arranging meetings extremely difficult for both parents to attend at the same time. This issue could easily be resolved by introducing a software-based reporting system that allowed parents to remotely access weekly reports. This would negate the need to physically meet with educators and would also allow parents to respond to accordingly with the action taken. This would free up time for teachers to educate more efficiently with better results from students.

The main aim of the literature review was to investigate the current reporting system and find a solution for bridging the gap between private and state schools in terms of parental collaboration. This can be achieved by a software-based reporting system that offered reciprocal feedback on both behavioural and academic performance. Breaking down the ridged and often entrenched attitude of the schools would also be overcome by using the software as it would effectively remove the interpersonal judgments that the school system may hold over working-class families.