

The theory behind the programme.

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Foreword

The 'smile' programme has been created to encourage young children to acknowledge and accept their own feelings, understand other people better and learn how to bloom in an everchanging world. Growing up with a mother that had many different mental health issues; including bipolar, multiple personality disorder and extreme anxiety brought its challenges. Learning her life story coupled with my own experiences over the years has been the driving force behind the motivation in creating the programme. I have over 20 Years experience in working with young people and have utilised the knowledge I have gained to inform the programme. It is forever evolving as we adapt and learn. My hope is that the programme can help the younger generations grow up with good mental strength, stability, and the tools to help through life's difficulties. I know extremely well how crippling mental health can become and what strains it can put on relationships if not supported in the right way. The 'smile' programme is unique, and it can be tailored towards the needs of a school or individual and yet stay the same at its core.

This piece of research 'smile to bloom' offers an insight into the theory that supports the programme. I do hope you enjoy the read and that you come away thoughtful and more curious.

<u>Introduction</u>

How can we teach self-well-being and higher-level thinking skills to develop more aware, assertive, creative, and reflective children? Smile to Bloom is the theory behind the smile programme that educates character skills (safety, motivation, independence, leadership, and empathy).

Abraham Maslow (1908- 1970) and Benjamin Bloom (1913 – 1999) both completed research into areas of psychology and education. Maslow's hierarchy of needs investigated the theory that our basic human needs must be met before we can access the thinking part of our brains. Physiological needs being first with basic food, water and shelter having to be present, the feeling of being safe and belonging, finishing with self-esteem being high and therefore starting to reach your potential (*Figure 1*). His research spanned decades and has influenced education. In the 1960s he adapted his model, and identified eight levels of the hierarchy, broken into Deficiency needs and Growth needs (*Figure 2*). Deficiency needs must be met first before Growth needs can be addressed.



MASLOW'S MOTIVATION MODEL

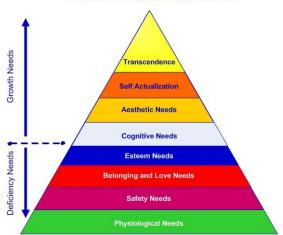


Figure 1: Maslow's Hierarchy of Needs – Simply Psychology researchers.

Saul Mcleod, PhD | published 2007, updated April 04, 2022

Figure 2: Maslow's Hierarchy of needs – elaborated upon by other

The Peak Performance Center 2023

Benjamin Bloom investigated order of thinking skills and how higher-level thinking skills can only be obtained once lower skills are secure. His work was presented in pyramid form; Blooms Taxonomy (figure 3), which indicates the first stage being acquiring and remembering knowledge before we can progress to learn how to understand, apply, analyse, evaluate, and eventually create. There is debate about whether this research should be presented in pyramid form. Stearns Center for Teaching and Learning suggest a ladder form and emphasises the importance of all levels being equal, Dr. Jessica Pilgreen Ed.D suggests the pyramid should be inverted and the top three levels on the same platform. The smile programme utilises all of Bloom's taxology and supports the levels being inter-changed once basic needs are secure. The leadership and independence strands discuss this further.

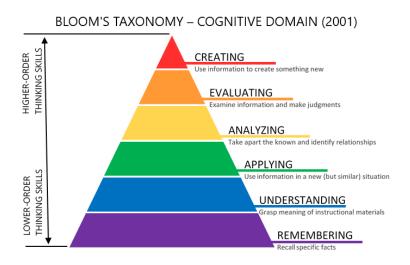


Figure 3: Bloom's Taxonomy - Center for Instructional Technology and Training - University of Florida

Both theorists' research is vital to our understanding of the development of the human brain. The saying 'Maslow before Bloom' is well established in educational circles indicating basic needs must be met before our brains can blossom. This is no real surprise but how we establish and promote this could be improved.

'Smile to Bloom' explores how we can link the two theorists work together, along with more recent neuroscience findings (for example; Carol Dweck, Daniel Siegel, William Stixrud and Ned Johnso) to teach cognition skills whilst promoting well-being.



(Figure 4: Smile to Bloom)

By using the smile programme and following its memorable framework we can strive to empower children from a younger age to understand their emotional and physiological needs better, give them tools to enable higher order thinking skills, and ensure they know how to bloom. This will result in higher academic success and, improve mental health. At a time when education is starting to evolve, in a direction of supporting mental health this is a crucial programme to invest in.

Part One: Safety

The first three stages of Maslow's theory all fall under the umbrella of 'Safety' within the 'smile' programme. This creates and strand provides ways in which to teach children about safety and how they must feel safe before they can continue an educational journey.

Maslow's foundation stage clearly outlines humans must have basic needs met. Food, water, and shelter before they can access their thinking brains. Providing children with an education that teaches what our basic needs are and how quality sleep could affect us, help will help them understand their own physiological needs better, which positively impacts their psychological development.

When children have a secure home, they develop a sense of belonging. Social links with family and friends grow and a sense of connection is achieved. At this point, the next stages of Maslow's hierarchy can be met. It is pivotal for brain development that the 'needs' of an individual to feel safe are well established before any further learning can take place. Schools have a role to play here. Overall well-being of a child should be a priority with staff working alongside care givers to create a safe and nurturing environment ensuring the fundamentals are provided.

Using the 'smile' programme raises the profile of the importance of 'safety' to both teachers and children. Teachers may identify the needs of a child more readily and by teaching the awareness of needs and how to feel and be safe children would feel more secure. Attainment at school through better attendance would also be achieved. One example of this is a study carried out in Africa where aid was provided in the forms of textbooks, this was extremely generous and thought very worthwhile However, research showed that it made minimal difference to the children as a group. A different aid was subsequently given in the form of deworming tablets, knowing that this was a health issue at the time. After the medication took effect children not only developed better physically but also academically due to the fact attendance was better so children could access the education. As Tim Hartford states 'the programme was a huge success, boosting children's height, reducing re-infection rates, and also reducing absenteeism from school.' By identifying their 'safety' needs education improved. (Black Box Thinking, 2015)

With the world facing the aftereffects of covid-19 pandemic it is a critical time to understand the needs of individuals and how we can encourage them to feel safe to improve attendance and engagement in school. 'The reasons why children experience difficulties attending are complex and can be related to learning difficulties, social anxiety, mental health issues, family problems or negative school experiences like bullying' (Sophie Black, The Guardian, Australian Education, 2023) by educating children about feeling and being safe and giving them the power to express how they feel could be the answer here.

Through building a 'safe' environment children would also be more emotionally stable and happy and could potentially excel their learning. From an early age children cannot necessarily be responsible for this but as children get older if they have developed an understanding of their needs and who they can approach for support they can then utilise this to better their well-being and education. Let us take for example;

Scenario 1: Child A has not had breakfast this morning and has only had an apple for lunch. They are ten years old. They have a spelling assessment this afternoon. How would they do? Their brain is on survival mode at this point and is constantly subconsciously thinking 'I'm hungry, I'm hungry,' this child is now showing frustration and anger in their behaviour. Child A cannot perform to the best of their ability in this spelling assessment as they are not ready to learn.

Scenario 2: Child B has had a full breakfast, but they did not sleep well last night, and they have not come to school with a coat. It is winter and the temperature is 2°C. They are 12 Years Old and about to have a Design and Technology lesson. How does this child feel, and will they be settled in lessons and achieve their best? Will they be safe with the equipment? This is unlikely to happen, this child will feel tired and cold. Before they can access learning these basic needs must be met.

Scenario 3: Child C's parents are getting a divorce. Home is a little unstable and they do not know where they belong. Although food is readily available; they have shelter, are warm and happy at school. Is this child going to have a good day at school? Can they learn effectively? Here the child's main issue is that they do not feel they belong anywhere. By identifying this the school could potentially help with talk therapy, friendship group clubs and promoting the child's self-confidence. However, these things take time and at the point of this scenario the child would not be focused and therefore will not learn as much as they could.

By educating teachers about the importance of safety (because needs must be met before learning can take place), and by encouraging reflection as to why a child may be behaving in a certain way, we are empowering them to help. All behaviour has a reason, and teachers mindful to the issues that may be arising in a child's life. Adults must show empathy and understanding for behaviours and help children to tackle them healthily. This means teachers must foster good relationships with parents or caregivers and take the time to find out a little more about the background of the child before action is taken. Creating a 'safe' environment for a child will positively impact their learning.

If we can also encourage children to learn about the importance of 'safety' they could potentially start to tackle these elements themselves and will be able to communicate effectively with safe adults to gain support in an area of need. By giving children more control over their lives we would also decrease stress and provide opportunities for developing the pre-frontal cortex part of the brain that is the executive decision-making chamber. This would positively contribute to creating a healthier and happier child.

This is just the start of the impact teaching safety to children could have. With more research we could identify the answers to these much bigger questions.

- 1) If we teach children how to be and feel safe would they take more calculated risks and improve their learning at a quicker rate?
- 2) If borderline achievers had the knowledge and the ability to identify and analyse their basic needs, how much better could their performance be?

Part Two: Motivation

Carol Dweck, known globally for her work in psychology and her best-selling book 'Mindset,' sees motivation as holding thoughts, feelings, and actions (The Neuroscience of Intelligent Decisions, 2022). This is addressed from an early age through the motivation strand of the 'smile' programme. Which raises the question, can motivation be taught and if so, how?

Once the deficiency needs of Maslow's Hierarchy are established, motivation starts to build. How motivated children are can impact learning, growth, and development, which makes it crucial to teach. Educating children about what motivates them and how to stay positive in challenging circumstances will help both teachers and children achieve more. When children are motivated to start a challenge and then show determination to keep going through these challenges, possibly failing as they go, this is what results in resilience, which is a fundamental skill for life. Therefore, not only must we teach children several types of motivation we must teach them how to fail and then fail better. Children must experience challenge to grow.

Matthew Syed supports this explaining in his book *Black Box Thinking*, that no-one wants to fail, and that success can only happen when mistakes are admitted and learnt from. He suggests that it is important to have a culture where it is 'safe' to fail. (Matthew Syed, Black Box Thinking, 2015)

His work illustrates the importance of the safety strand being taught first followed by motivation. If we provide opportunities for children to learn from failing, we will build self-esteem and create more resilient and motivated individuals (linking directly with Maslow's theory).

James Dyson, Thomas Edison, and Drew Hudson, all provide us with examples of how they frequently failed, and it is because of these failings that they are more successful. It is important to note that we learn quicker from failing and reflecting than we do from getting it right all the time. Dyson made 5,127 vacuums, all slightly different in some way. He suggests that he would not have been so innovative in his solutions if he had not failed. He believes imagination is built by failing and that you must fail to become more innovative (https://www.jamesdysonfoundation.co.uk/who-we-are/our-story.html). Edison is well-known for his work on the lightbulb. His famous quote 'I have not failed. I've just found 10,000 ways that won't work' illustrates why motivation is so important to teach (Edison Innovation Foundation, https://www.thomasedison.org/edison-quotes). It inspires us to realise learning happens best when met with failing and motivation to continue trying. Hudson the founder of the Dropbox concept only thought up the invention after repeatedly forgetting his USB flash drive while he was a student at MIT (https://www.bbc.co.uk/news/business-44766487). This is yet another example of how failing inspires creativity and growth.

Education must provide opportunities for 'getting it wrong' or put simply 'messing it up.' By giving children these opportunities, you are ensuring children develop a growth mindset for the future, they will develop the part of the brain responsible for problem solving, creativity and memory. This could be summarised as *Black Box Thinking* which is about digging deeper when we fail and seeing these failures as opportunities to learn. Often, we fail and then blame or search for a reason for the failing, whereas we should be looking at what can be learnt from

the failing. What is the next step forward? How could we do this better next time? What is this mistake trying to teach me?

If this environment could exist, it would encourage a mindset where logical thinking skills rather than irrational emotional responses to difficulty can be developed. The brain can then learn to make appropriate and educated decisions rather than the emotional part of the brain taking solo control. Recent neuroscience findings explain the importance of both systems working together to reach better decisions and responses, this is called 'integration.' There is much research into the part of the brain called the amygdala, a primitive emotional processing centre that is sensitive to fear, anger and anxiety takes charge when stress levels are high and if not trained it can overrule decisions that our logic might make differently (The self-driven child, 2018). If we can develop the ability and teach the brain 'integration' from exposure to challenge then brain development would be better; self- actualization can start to establish, and personal potential can be realised. If we can establish a positive mindset by teaching motivation, acceptance of failure and positive talk we would have highly motivated individuals with a higher level of self-esteem and therefore better well-being. Taking these skills into adulthood rather than having to relearn when they are adults.

It is important to note that motivation is not always achieved through reward; it is often achieved through interest and finding things enjoyable and fun to do. If we could educate children about intrinsic motivation and to foster a love for learning we would be producing more engaged, curious, and satisfied learners, for example, 'The Carrot or Stick' experiment conducted on school aged children. Supplying a group of children with an extrinsic reward for drawing and a different group no reward. The results indicated that the children who had received the reward drew less often as they originally drew for enjoyment, and it now felt like work (Marcus Weeks, Heads up Psychology, 2014). This illustrates that offering a reward does not always increase motivation.

Cognitive dissonance is the psychological term used to describe this behaviour (https://www.psycom.net/cognitive-dissonance). We no longer want to do something because someone else has suggested/influenced it. This links with the next section of this work 'independence' but does affect motivation and we must be mindful to this idea if we want to influence young minds to grow and not stop. Furthermore, it is important to scaffold learning and depending on the child we may want to issue extrinsic results to encourage to start something but at some point, we must establish an enjoyment for learning needs to be fostered. This usually comes when someone feels successful at something and achieves.

At this point it is relevant to discuss 'Closed Loop Thinking,' which is something that can also be addressed when teaching motivation. Closed Loop Thinking is a process that excuses failing rather than provides a learning opportunity. It provides excuses/reasons for why something did or did not work, meaning there is no growth that can happen in either scenario. This could be thought to be a tactic used to protect egos and self-confidence. We filter out other information that does not necessarily fit with that pre-existent belief. There is a simple reason for the outcome and therefore no learning can take place. 'Most closed loops exist because people deny failure or try to spin it.' (Mathew Syed, Black Box Thinking, 2015)

In addition to everything discussed so far, we need to adopt a mindset where we are motivated to look for the less obvious reasons for mistakes. This will not only solve future problems but develop the creative part of the brain. In the late 1930s, Abraham investigated planes and the damage that occurred during World War II, he discovered:

'The holes in the returning aircraft represented areas where the bomber could take advantage and still return home safely. They had survived precisely because they had not been hit in the cockpit and tail. The patterned holes, far from indicating where the armour needed to be added to the aircraft, was actually revealing the areas where it did not.' (Matthew Syed, Black Box Thinking, Pg. 39, 2015)

This is such a thought-provoking discovery as this higher-level thinking is exactly what we must encourage by providing opportunities to explore and fail and staying motivated.

Alongside this it is important to encompass the teaching of purposeful practice and feedback under the motivation strand. Developing a valuable feedback loop and supported purposeful practice plays a significant part in sustaining motivation. Research has shown that children with no direction in how to do a task do not achieve as much as those with some direction, but specific ridged instruction does not involve the creative part of the brain which is inevitably responsible for innovation. Balancing creativity with guidance is a complex and challenging task. If a child is practising a certain skill with the wrong technique this would have negative outcomes and therefore motivation would decrease.

Previously self-confidence and self-worth have been discussed and it has been suggested that learning can only take place once a child has these attributes, if motivation decreases, achievement will be lost, and self-confidence and self-worth will also deteriorate. With guided purposeful practice and instant feedback this can positively affect a child's motivation and therefore their ability to learn more. In educational terms we call this scaffolding or guided-discovery teaching. Children are guided towards a direction but not given answers. They are developing knowledge through experimentation. Feedback is given instantly which requires another decision to be made. We can look at chess players as an example as to why instant feedback is important. Chess players are expected to make calculated decisions based on the move their opponent, if they make a mistake they are instantly punished. Each time they make a move they receive instant feedback forcing players to adapt, to improve, to restructure their judgements. This develops their knowledge of the game, whilst improving their processing and critical thinking parts of the brain.

Conversely, 'feedback when delayed is considerably less effective in improving intuitive judgement' (Black Box Thinking, 2016). Michael Jordon is a fitting example of how failing, instant feedback and purposeful practice results in succeeding 'I've missed more than 9,000 shots in my career. I've lost almost 300 games. Twenty-six times, I've been trusted to take the game winning shot and missed. I've failed over and over in my life. And that is why I succeed' (Michael Jordon). He has received instant feedback from the missing shot by processing the direction and speed the ball came away from the basket. He would reflect on this and adjust how he takes the shot every time.

Without motivation we would not try, take risks, or fail in order to learn. It is a fundamental skill needed to progress. Dyson advocates that the educational system is good at teaching facts, figures and encouraging children to learn how to regurgitate information but that it does not allow children to learn enough through experimenting and experience. He believes this is a great pity as both are needed in the wider world. (Matthew Syed, Black Box Thinking) By teaching children about motivation throughout the curriculum you are encouraging a different style of learning so children will not only remember the facts, but they will also develop curiosity and skills. Matthew Syed claims 'beneath the surface of success — outside our view, often outside our awareness — is the mountain of necessary failure' (Matthew Syed, Black Box Thinking, 2016).

Part Three: Independence

Developing independence has many advantages: it can boost self-confidence and self-esteem, reduce stress, and promote happiness, improve our decision making, allow us to help others, help us to fulfil our personal goals and make us more self-aware. The foundation to social and emotional growth. Once we are safe and motivated, we can start to build independence, resulting in improving our remembering skills and understanding. Providing children with safe environments where they can take risks and learn will provide opportunities to develop independence.

Gaining knowledge of what it means to be independent and learning strategies of how this could be achieved is the best starting point in developing independence. Ensuring a clear understanding of the skill is needed before it can be achieved. It must be noted that parental support is vital to accomplish this. Tammy Schamuhn, a registered Psychologist (The Independent Child) and Dr. William Stixrud (The Self-Driven Child) discuss independence and they emphasise how we are not protecting children by doing things for them. We would be protecting them by increasing a better sense of safety and encouraging them to take safe risks to learn. Mastery cannot be established if they are not given opportunities to practise and to get it wrong at points. One strategy in obtaining independence as to give choices; starting with simple closed questions when they are young and then progressing this with age. For example, would you like the blue cup or the red cup? Eventually leading to a more complex question as the child ages: do you want to eat all your sweets now or save some for later? Do you think homework is beneficial? If so, why? If not, what would you replace it with? By requiring a child to make a choice they are empowered and will learn over time good decision-making skills and will want to eventually solve their own problems.

James from Nursery Nook explains a few other methods to start teaching independence when children are in the Early Years Foundation Stage. One method is to start by teaching a small group of children a certain skill, making sure you explain (physically talking through) each step as you go and then encouraging them to teach each other reciprocally in the class. This will only work if the skill learned is fresh knowledge and has been practised through a few times. He goes on to talk about another method called the 'three before me,' when children reach difficulty in a task, they ask three different friends to help them first before asking the teacher for help. This not only helps the learner but encourages others to practise what they have learnt and embeds knowledge. Furthermore, he discusses the importance of sharing expectations with children in circle time. Sharing openly the expectations that I support you to ask three other children before me (https://www.nurserynook.co.uk/). Importantly, Dylan Wiliam reminds us that extrinsically motivated children cannot easily transfer skills they have learned to others, they need extrinsic rewards for doing a task and do not get this when passing their knowledge on. This is not to say it is out of their capabilities but as teachers we must be mindful that these children will need positive praise throughout the process. We must also all remember that children are just that, children and need nurture and support in becoming independent. This reminds us how important the prior teaching and learning of the safety and motivation strands now become.

These practices can be related to any age child but for them to 'buy in' we must communicate them age appropriately. The 'Brain, Book, Buddy, Boss' or 'Think, Friend, Ask' systems are well-known at helping children to become independent learners. Children are taught to search for answers to challenges by using their own brain, by using a book, asking a 'buddy' and then if needed approach the boss (teacher in this case), similarly the 'Think, Friend, Ask' applies the same principles. The important thing to note is that children need opportunities to practice independence, they need challenge to learn to problem solve and they need encouragement to try and figure it out.

When developing independence, the 'independence cycle' could be used, which gives a method to follow: Think Creatively, Help Yourself, Reflect and Respond, Review (See Figure 4). This repeats as a cycle and encourages innovative ideas to be brought forward. It also illustrates to children that there is no finish point, learning is constantly evolving.

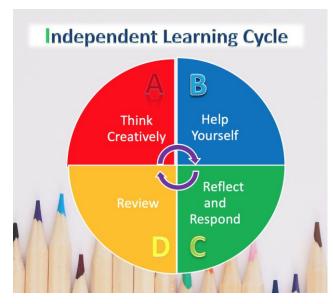


Figure 4: The Independence Cycle, The Smile Education Hub

If children can be independent then they can grow; 'practice makes permanence' is a well-known saying and children will get more practice at something if they can do it independently rather than having to wait for consistent reassurance, guidance, or instruction. Think about how a child first learns to walk: they start by standing and then falling many times. They then take some steps with aid, a walker to stand in, then they have a walker to push, they use sofas to cruise along and then they take their first steps unaided usually from one object to another to ensure they do not fall. Eventually they toddle around independently. On average how many times does that child fall before they walk? How many times does that child fail? This failure offers instant feedback to the child, the child rarely gives up, instead they show great determination to try again. Do these opportunities develop resilience and independence? Could they also aid the development of mental independence? As previously discussed, failing is the first step to succeeding therefore by improving motivation to keep trying and providing opportunities for children to practice independence can grow. As a child develops, we can then apply the findings of Andrers Ericsson who has completed a huge amount of research in the field of deliberate practice, discusses the importance of feedback and how this can affect

learning (Peak: Secrets from the New Science of Expertise). His research supports the reflecting and responding section in developing independence.

It is important to note that the psychology behind developing independence is about control. If a child feels in control of the situation and the decisions being made, the child will have lower stress levels and develop independence much faster and concurrently will be able to cope with a wide range of situations much more productively and healthily. William Stixrud and Ned Johnson discuss this in their book 'The Self –Driven Child.' They talk about the prefrontal cortex part of our brain handling executive decision making, the driver. To have this part of the brain working at its optimum level it requires a delicate balance of hormones. The amygdala plays a critical part in this. If a child is stressed because of a lack of control around a situation, the amygdala will take control and the prefrontal cortex shuts down. Meaning decisions are emotionally driven not logically driven. The brain is unable to learn or to think clearly. Stress responses must be conditioned by allowing children to make decisions and to face challenge they have had a part in choosing and work through them.

Here, the importance of sleep is also reiterated, which brings us back to our safety strand. When children are sleep deprived or highly stressed the prefrontal cortex becomes flooded with dopamine and norepinephrine which results in this part of the brain effectively going 'off-line.' The executive control system has stopped, and impulsive decisions start to happen. If this continues through micromanaging children rather than giving them choices a child will not become independent and potentially could struggle with anxiety and depression later in life. We must develop independence by encouraging a 'safe' risk taking environment and building a courageous child so that the brain can fully develop.

When we feel safe, motivated, and can show independence, feedback can be received. Children will then be able to use this instant feedback to adapt their own learning. Self-confidence grows, self-worth improves and a love for learning becomes more prevalent. Cognitive dissonance does, however, come in to play at this stage of development (https://www.psycom.net/cognitive-dissonance). If we start to become overconfident, we can make more mistakes due to not responding to the feedback that is presented. Error denial also increases. We start to think that we are always right. We are over aroused and have a heightened sense of self-worth and self-importance. We ignore the feedback presented and do not reflect, review, and respond. We cannot now progress. Interestingly, this links with The Inverted U Theory (Figure 5) which many high sports performers refer to (https://www.mindtools.com/ax20nkm/the-inverted-u-theory).

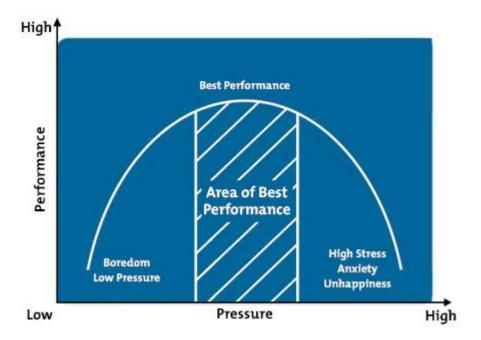


Figure 5: The Inverted U Theory

Yerkes and Dodson's research found that there is an optimal level of arousal with sports performers. Indicating that if the level is too low the performance is poor but equally if the arousal is too high then performance also lowers. Self-confidence and cognitive dissonance work similarly to this. When teaching the independence part of the programme we must ensure we are encouraging children to grow in self-confidence but monitor and guide children so as not to over arouse and therefore decrease performance.

We can learn from all this research that when teaching Independence, we must ensure we promote effort above outcome. We must allow children control over their decisions, and we must give opportunity to practice.

Part Four: Leadership

Once a child feels Safe, is Motivated and shows Independence they now have the basis to develop an understanding of Leadership. The research surrounding the skill of leadership is abundant, it suggests that leadership is about the empowerment of others to achieve their fullest potential, allowing mistakes and therefore growth to happen in a safe environment. Coach Hub, 2022 investigates types of leadership and how they impact others. David Sturt, 2021 discusses this further in his article 'Do you have what it takes to be a modern-day leader?' It is a philosophy that highlights the importance of building others' self-esteem by offering guidance, opportunity, support, and psychological safety. This encourages confidence to grow and therefore risks being taken with the aim of optimum learning and positive outcomes as a result. This is complex skill to master and requires in-depth knowledge and practice encompassed by an empathetic and safe environment. Skills such as mutual respect, setting good examples and offering ideas are primary steps that can be introduced at an early developmental stage.

Dr Amar Rughani, a GP from Sheffield, is well versed in leadership and the importance of it in Primary Care settings. He is also extremely interested in education. In his book he gives us great insight into leadership and why we should teach it (The Leader Hike, Amar Rughani and Joanna Bircher). He states that one of the major parts of leadership is the ability to listen and combine different ideas. It is about collaboration and communication and helping others grow. Having good leadership skills enables you to inspire others to do their best. Nurturing this ability in children would enrich the future. Developing effective communication skills is something that needs to be practised and should be encouraged in as many settings as possible. Group work, taking turns, performing in assemblies, listening to inspirational role models, showing good manners, being courteous and inquisitive are good starting points that could easily be included in the school day. By giving these opportunities, children's self-confidence can grow. By having good self-confidence, we have more control and this in psychological development allows the prefrontal cortex to develop and encourages us to learn more. A love of learning and how to help others can develop.

Another way to develop these basic leadership skills that will over time become higher level thinking skills, is to encourage problem solving activities. By giving problems to children and allowing them space and time to figure them out in collaboration with others we are providing the much-needed practice time for listening and learning, offering ideas, trying, failing, and bouncing back. Matthew Syed is well known for his book 'Bounce' which consistently talks about the mastery of practice in sporting achievements. He discusses the 10-thousand-hour rule that when applied to sports is the difference between good and great. The same rule applies here with leadership skills. They must be practised, failed, and then failed better, until the learning has become better and more autonomous. In chapter two of this article when motivation is discussed it is psychologically proven that a growth mindset is vital to success. We therefore must link teaching the skills associated with leadership to those that encourage motivation.

Leadership involves applying knowledge to situations and starting to analyse it to make better decisions, but how do children do this if they have not yet developed the knowledge? Researched and written by Saffi Mant Co-Founder of The Smile Education Hub

Leadership involves excellent communication skills; Dr Amar Rughani describes it as a people art. By learning how to lead you are learning how to build effective relationships and you are helping to improve the world around you. If a group of children are working on a task does the leader of this group have to be the person with the best knowledge or could it be the child that has good listening skills, can share interesting ideas, can gather others' ideas, and can ask questions? More importantly, would this child excel in their learning quicker if given this role? Knowledge is a powerful tool; however, without the leadership skills to accompany it knowledge will not thrive. If, as children learn the academic knowledge, they are given opportunities to develop skills to be a good leader they can then start to inspire and help others.

Another opportunity to develop leadership skills within a school setting is to give opportunity for year group mixing to allow older children to coach younger children. This could be done, for example, through play leaders, reading 'buddies,' workshops, and prefects. This could be envisaged as 'the trickle-down-theory' which plays a huge part in all the areas of smile but particularly leadership. By allowing children that are a year or two ahead to lead younger children, all children are more engaged. Older children will learn to become better communicators, more reflective thinkers, develop their understanding and grow their knowledge. The younger children will want to copy effective modelling will be taking place. Children are more inspired by the age group above as it is closer to their reality, and they see it as more achievable so subconsciously pay more attention. If we could get children to follow the saying Leadership starts by leading yourself, applying the effective behaviours the child has seen, we would develop more reflective and considerate young adults and we would be building awareness throughout every child.

Part Five: Empathy

Empathy is the most important ingredient to well-being and achievement, but it is a hard skill to master. To be able to show empathy, a person benefits from having experience. Not necessarily the same experience but having some experience of different emotions can help the understanding of others' feelings. Starting to teach this skill from an early age by modelling effective and appropriate communication with children, being good role models, raising the profile of the skills involved and celebrating children that are showing empathetic skills could create a kinder, safer and a more understanding environment. Through doing this we are then able to help each other learn much more.

'Our ability to know our own minds as well as to sense the inner world of others may be the singular human talent, the key to nurturing healthy minds and hearts.' (Foreword, mindsight). It is Empathy that improves communication and well-being. When people can empathise with another human they feel peace, connection, and perspective; whereas when they cannot experience empathy, they are often left feeling stressed, disconnected, and negative. Empathy is the basis for all good relationships and helps us achieve our goals. 'Self-awareness and empathy are (along with self-mastery and social skills) domains of human ability essential for success in life. Excellence in these capabilities helps people flourish in relationships, family life, and marriage, as well as in work and leadership.' (Foreword, Mindsight) Being empathetic is clearly a valuable and vital skill to have in the 21st century but the question remains how to teach it? Can this skill be learnt?

It is important to note here that empathy starts with understanding and compassion for others. Empathy can be taught to children and can help immensely with brain growth and development. Effective communication is where the skill first starts to evolve. Parents, caregivers, and teachers have a key role to play by modelling effective communication with children. If the adults surrounding the child can demonstrate care, curiosity and understanding and remain calm when talking through various situations that occur in a child's life, they will be showing how to show empathy in its basic form. 'Parents who speak with their children about their feelings have children who develop emotional intelligence and can understand their own and other people's feelings more fully.' (Pg 8, The Whole-Brain Child) By acknowledging feelings that have occurred in a child's life and offering explanations we are educating not only how to appropriately communicate but also how to show understanding, which will then improve children's decision making. This is not to say children are always right or there should not be consequences for poor behaviour but by asking the child questions and showing how much you understand their viewpoint and then offering guidance on how to healthily move forward, the child is directly being shown the benefit of communication and understanding and will start to copy this when in similar situations.

If we can encourage empathy by showing it, we are also teaching young children to access different parts of their brain and are giving opportunity for integration to happen. Integration is the process that involves teaching the brain to connect its different parts so that they work in harmony and unison rather than separated. This can positively affect mental health because the emotional part of the brain will have processed and therefore aids logic and allows better decisions to be made. Dr Daniel Siegel and Dr Tina Payne Bryson summarise 'that way, our Researched and written by Saffi Mant

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children will value both their logic and their emotions; they will be well balanced and able to understand themselves and the world at large.' By allowing the brain acknowledgement and processing time of the feelings that are happening we are encouraging the different segments of the brain to influence each other and gaining better 'neuropaths.' We are training the brain to control emotion and allow logic to influence decision making and responses.

By encouraging integration of the brain 'we can achieve more complex goals and carry out more intricate, sophisticated tasks. Significant problems arise when the two sides of the brain are not integrated, and we end up coming at our experiences primarily from one side or the other. Using only one part would be like trying to swim using one arm. We might be able to do it, but wouldn't we be a lot more successful – and avoid going in circles – if we used both arms together?' (Pg 18, The Whole Brain Child)

Providing children with explanations for events that happen in their lives is vital to their understanding and in turn will help them gain knowledge. Children can only learn the whys and the hows if we as adults explain them in a calm and informative way.

We must also give children opportunities to form friendships from an early age, this encourages social and emotional growth. Often children play in parallel with each other, which is where social interaction starts. They love to play what they want but value the company of others around them doing a similar thing. Children then learn to interact with one another, and the emotional and social part of the brain is developing at this stage. How many times have you heard 'she stole my toy!' This is common with young children; they see what they want and take it. They do not have the level of understanding which allows them to process who has the toy and how it will affect that person. As caregivers it is our job to develop their emotional education here. By being a mediator, we are allowing children to develop understanding, talking to both the children in this situation and discussing with them how they both felt starts to develop empathy. Ensuring they listen to each other and taking a calm approach to resolving conflict through understanding is helping a child develop their emotional and social well-being. When conflict situations arise, it is important that calm discussions follow allowing children to explore their feelings and think about the implications and influence they have on others. Being aware of our own feelings and how we affect others is powerful and can help change the world to be a better and more fulfilling place.

Another way to develop the skill of empathy is through animals. Animals can be soft, calming and kind. They can provide a human with a best friend. They give without expecting much in return and they never argue. By using animals, you are helping children understand how others may feel. Through love for animals, children develop compassion and through these skills comes empathy. Future research into this field is recommended.

People always remember how they felt before the knowledge they gained, if we can encourage growth in terms of kindness and compassion, we effectively allow empathy to grow. "What do you think is the biggest waste of time? Comparing yourself to others said the mole" (The boy, the fox and the horse, Charlie Mackesy.) It is important to educate an understanding of others rather than a comparison to others. We each are unique and bring different qualities to situations. We should learn to empathise with others and not make comparisons.

If we can educate an understanding through careful mentoring and nurturing, we can really start to relate to others, building our social strength, self-esteem, and sense of belonging. The bigger question here is 'can we know the minds of others, so that we understand "where they are coming from" and can respond more effectively and compassionately?' (mindsight) If we can do this, we can develop well-being and in turn success and happiness.

Part Six: Summary

Smile to Bloom offers the opportunity to comprehensively educate young children about emotional, social, and mental needs to access higher level thinking skills. It combines the theories of Benjamin Bloom and Abraham Maslow with top neuroscience and neuroplastic research. The program not only provides a platform that can be adapted to suit the learners needs but also allows you to weave it into your current curriculum and life. It is fun and memorable for children and adults alike, meaning it is difficult to forget, even when you are facing challenges.

The research provided here offers an insight into the way this programme could help develop young minds into healthy high functioning brains. Encouraging development through conversation and opportunity with guidance from all these areas is fundamentally vital to healthy brain growth. Research by Carol Dweck, Daniel Siegel, Tina Bryson, William Strixrud and Ned Johnson can all be linked to the 'smile' programme. Their research offers pivotal information about all the key areas and continues to inform the develop of the programme.

If caregivers, teachers, educators, and role models could foster these skills and show them throughout everyday events this could help develop more aware, assertive, creative, and reflective children/people, slowly aiding the world in which we all live. Imagine too if our youngest of children learn this method they will then be showcasing to the younger generation through the 'trickledown theory.' Children learn faster and better from the peer group above so growing this programme from the bottom up is recommended.

Figure 6 illustrates how the programme can be used to progress children through Maslow and Blooms well known theories.



Figure 6: Smile to Bloom

The research here has so much more to be explored and will evolve, which will inform the programme and how it can be shaped to support the direction of our world and its needs. Nothing stays the same and our needs as individuals and humans will change, the beauty is that this is the foundation that can be altered depending on future research and the needs and wants of our world.