



Developing Essential Skills

Supporting self-regulation in 3-4 year olds

Early Years Teachers handbook



Introduction

This manual provides support for early years practitioners who are exploring the concepts of self-regulation and the implications for practice. It is a resource that is designed to enable preschools to support self-regulation abilities in children aged 3-4.

'Self-Regulation', 'Managing Self' and 'Building Relationships' are now included in the Early Learning Goals which are measured as part of the Foundation stage profile.

In concern for economy of expression, the term 'pre-schools' is used in this handbook to indicate any provision for children aged 3-4; the term 'teachers' is used to indicate any adult interacting with children in pre-school settings.

This action research project and the resulting manual has been developed by Dr David Whitebread, formerly acting head of the PEDAL centre University of Cambridge, working with teachers from three London preschool settings, a maintained nursery school, a nursery class within a state primary school, and a LEYF social enterprise day-care nursery. The project was managed by the Sutton Trust and supported by the University of Oxford.

Whitebread is one of the leading academic figures investigating the significance of Self-Regulation in early childhood; he has drawn on his expertise and wide knowledge of the subject as well as those of other leading academics in the field (in particular, Nancy Perry).

Contents:

Section 1. The nature and significance of self-regulation in young children in the 3-4 age group and the importance for young children of acquiring these abilities.

Section 2. A pedagogy for self-regulation

- A review of research evidence supporting the key elements in practice. A pedagogy for self-regulation, arising from this evidence is set out and explained.

Section 3. The professional development program: action research

- Teacher Professional Development
- The self-regulation course

Section 4. Putting it into practice

- Projects
- Documentation – Planning & Monitoring
- Data collection – notes, photos, video, transcripts
- Details of running, documenting, articulating and reflecting upon projects designed to enhance the development of self-regulation abilities in the young children in your setting.

Section 5. Measurement of the children's self-regulation

- Teacher assessment using the Children's Independent Learning Development (CHILD) observational instrument

Section 6. Children's progress during the development study

- Examples illustrating children's activities relating to the CHILD statements
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Example projects

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Further reading

Section 1.

The nature and significance of self-regulation in young children

The significance of early self-regulation development

Self-regulation comprises an individual's ability to be aware of and to deliberately control their own mental processes, including cognitive strategies, emotions, social skills and motivations. These abilities develop most rapidly in young children during their first 6-7 years and have been shown to predict a range of academic and 'soft' or '21st Century' skills development through childhood into early adulthood more powerfully than any other aspect of early development.

Achieving a good level of self-regulation in the pre-school years has been shown to ensure that children:

- are able to cope with school and make a good start on learning to read and mathematics
- are better able to make friends and maintain friendships
- become effective learners, and enjoy a good level of academic achievement in the short and long-term
- develop a belief in their own abilities and a high level of self-efficacy i.e. a belief that they can learn, or understand, or solve a problem, or develop an ability, if they work hard and persevere
- develop a good level of emotional well-being.

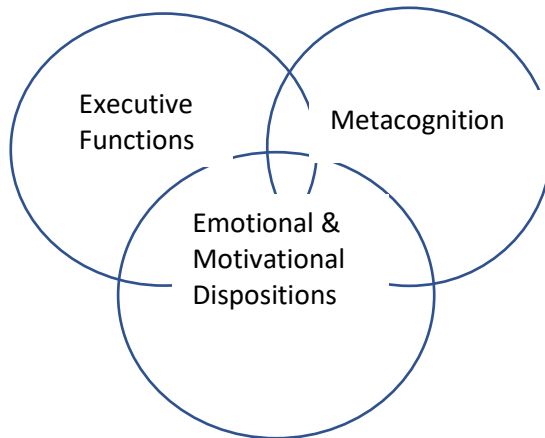
The nature of self-regulation

The emergence and early development of self-regulation arises through interactions between three sets of developing abilities and dispositions in the brain of the young child. As illustrated in Figure 1, these consist of:

1. executive functions,
2. metacognition
3. emotional and motivational dispositions.

These three sets of mental processes combine to enable the young child to move from being '**other-regulated**' (i.e. dependent upon others to meet their needs and achieve their goals, to help them cope with difficulties and disappointments, and able only to respond impulsively to events and experiences), to being **self-regulated** (i.e. being able to organise themselves, deliberately plan to achieve their own goals, to develop their own ways of undertaking tasks, and to manage their own emotions). As a consequence, self-regulation abilities impact on all areas of a young child's development, including their emotional, social, cognitive and motivational development.

Figure 1: Mental abilities underpinning the development of self-regulation



Executive functions

These are basic processes by which the young child learns to manage their responses to events and experiences, each of which steadily improves in the first 6-7 years:

- *working memory* enables the child to hold information in mind while they process it (eg: a child uses working memory to help her search for an object after listening to her teacher/parent describe where it is kept in the cupboard)
- *inhibitory control* enables the child to stop an impulsive or automatic response to an event or experience, to stop and think, and make a different response (eg: *not jumping in a puddle when you haven't got your wellies on; not running across the road without looking when you see your friend*)
- *attention control* enables the child to deliberately focus their attention, based on an idea or a goal, to not be distracted by each new event or experience, and to switch their attention flexibly when this is helpful (eg. *A child asked to sort a selection of toys in different ways would be able to sort them first by colour and then by type.*)

Metacognition

This involves two complementary sets of processes which enable the child to be aware of their own mental processes and to control them. These are called:

- *Monitoring*: eg: keeping track of progress on a task, detecting mistakes, being aware of how well you are doing
- *Strategic control*: eg: planning how to do a task, choosing a mental strategy or approach, developing new mental strategies for tasks, checking progress, correcting errors

Emotional and motivational dispositions

This involves the young child learning to manage or regulate their emotions (eg: being able to wait, cope with a disappointment, persevere when experiencing difficulties) and motivational dispositions (eg: have the confidence to try new tasks, enjoy solving problems, rise to challenges).

The Metaphor of riding a bike is a useful way to understand the relation and relative contributions of these three elements in self-regulation.

- A bike is a useful and efficient way of making a short journey, and some bikes are more efficient than others. The bike represents executive function skills.
- A bike needs a person to ride it - When someone gets on the bike, they first plan their route, then they monitor their progress on a moment by moment basis, pedaling harder to get up hills, applying the brakes when necessary, steering round corners by moving the handle bars, and realising when they have gone the wrong way and need to turn back.
- The person on the bike represents **metacognition**, and also **emotional and motivational dispositions**. Undertaking a bike ride, like any activity, makes demands on the person's emotions and motivational levels as well as a purely cognitive abilities. The person needs to manage their emotions because there will be difficulties and frustrations on any journey caused by traffic jams, other road users, the weather changing, the bike breaking down, and so on. And finally, the journey will not happen at all if the person concerned is not motivated to undertake it, particularly when it is a journey that has to be done, but the person would rather be doing something else.

Figure 2: Self-regulation is like riding a bike



- Working Bicycle = executive function skills
- Rider with knowledge of how to ride a bicycle, where they want to go on the bike, what is the best route= metacognition
- Motivation and courage to make the journey = Emotional and motivational disposition

Supporting early self-regulation abilities:

Research has shown that children's early development of self-regulation is highly dependent on the quality of their early social interactions, on their oral language development, and on the opportunities they have had to play with other children, their parents or other caregivers. As a consequence of variations in these factors, there are huge individual differences between the level and profiles of children's self-regulation abilities by the age of 3.

These environmental influences, however, also mean that the quality of 3 and 4 year old's experiences, once they enter pre-school provision of any type, can have a very substantial effect on their self-regulation development. In other words, **early years educators are in a unique position to have a major beneficial influence on children's development, their realisation of their full potential as learners and a whole range of positive life outcomes.**

From extensive evidence in pre-school settings, a lot is now known about the characteristics of these settings that contribute to children's development of executive functions, metacognition and their emotional and motivational dispositions.

These characteristics can be categorised as being related to

- the environment,
- the activities provided
- the quality of interactions with other children and adults in the setting.

The following section sets out the principles and practices which have been drawn from this evidence.

Section 2.

A pedagogy for self-regulation

A number of major reviews of the difference to children's progress made by a wide range of educational interventions and programs, has concluded that the greatest impact is made by programs designed to support children's metacognition and self-regulation, and that this impact is enhanced further if the intervention occurs in the early years of education.

Given this, it is also not surprising that a large body of research has investigated the characteristics of schools, teachers, curricula and classrooms that most powerfully support the development of self-regulation in children, and particularly young children. Essentially, three aspects of the educational experience have been shown to contribute most directly to an effective pedagogy for self-regulation. These concern:

- The environment of the classroom
- The nature of the activities available for the children
- The quality of social and educational interactions in the classroom

Features of these three aspects of early childhood educational provision that contribute most significantly to the quality of the children's experience in their pre-school or nursery setting have been shown to be:

- Emotional warmth & security, including providing structure
- Creating a community of learners
- Giving children a sense of autonomy and feelings of control
- Providing challenge
- Supporting children to talk about their learning

The detail of the key principles and practices developed for the program derived from this evidence is set out in the following pages.

A list of further reading reviewing the evidence supporting these principles and practices is provided at the end of the handbook in Appendix b.

Key principles supporting the program

Emotional warmth and security

Environment	Description
Rules and procedures which help children organise themselves	Class rules and procedures for undertaking activities are established which enable children to carry out tasks independently
Children's roles & responsibilities	Children take turns to undertake roles and responsibilities in relation to class administrative tasks and routines
Familiar routines Participation structures	Predictable routines for participation and norms for engagement in activities are established or co-constructed with children. Different ways of participating are valued.
Activities	
Meaningful tasks and activities	Tasks and activities are complex by design (i.e., address multiple instructional goals; are meaningful and authentic; often extend over time; involve cognitive and metacognitive processes; engage children in aspects of the cycle of strategic action; allow for multiple products or ways to represent knowledge)
Interactions	
Monitoring progress and providing encouragement	Show an interest in the children and enjoyment of the children's natural playfulness. Discuss difficulties they have and show that you appreciate effort and enthusiasm.
Expectations/Instructions Explaining/introducing activity; Making learning intention explicit	Expectations and instructions are explicitly discussed and/or co-constructed with children. Instructions and expectations are clear and flexible, and explanatory rationales are provided.
Visual prompts	Visual prompts cue children's engagement in self-regulated learning (e.g., cue metacognition, motivation for learning, and strategic action).

Example: Rules and procedures which help children organise themselves

Making sandwiches:

The children were using the home corner, but their play was repetitive and they wanted to use different materials, to enhance what they were doing. So, I decided to introduce them to making sandwiches



We started with basic rules and skills



Working out how to hold the knife: using a previously taught strategy

“I did it!”



Example: Expectations/Instructions; Explaining/introducing activity; Making learning intention explicit

We are going to listen to each other playing music



During this workshop with children ask them what instruments they like the sound of. Use two instruments and ask them to name the instrument they hear.

Encourage the children to focus on the sounds of music and how it makes their body feel.



Hold daily music sessions and ask each child to contribute by playing an instrument solo and give recognition to the children who are able to resist the urge to play alongside their peer.

Creating a community of learners

Environment	Description
Supporting/Celebrating one another's learning	Children are encouraged to share goals and work collaboratively. They engage in adaptive help-seeking and spontaneous help-giving.
Documenting children's work/interactive classroom display	Classroom displays are used to celebrate children's achievements, to share ideas and to stimulate children's interest and imagination
Activities	
Accommodations for Individual differences	Tasks, activities, and assessment practices are open and flexible enough to accommodate diverse interests and abilities across children. All children can participate meaningfully and experience success
Interactions	
Co-constructing knowledge	Teachers and children are partners in learning and knowledge building.
Positive/ Non-threatening communication	Teachers and children speak to one another respectfully with encouragement. Assessment and feedback emphasises growth and downplays social comparisons.

Example: Documenting children's work/interactive classroom display



Building with boxes

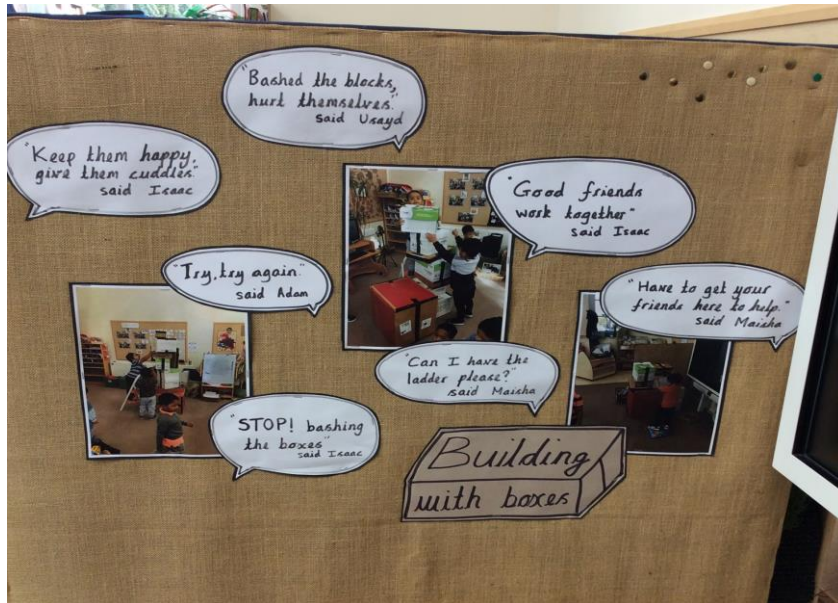


To introduce the activity when the children came in one morning they saw a tower built with cardboard boxes. They were immediately excited and wanted to topple the boxes and build for themselves.

All Nursery practitioners were told not to feel that they had to step immediately if there was an issue with a child not sharing or taking turns, as this would be used as a talking point for further discussion.

Class discussion

The children watched a series of clips that were edited from the first two days of the activity. They watched the videos twice over and were asked to talk about what they saw. I pointed out the good points in the first two videos and in video 3 and 4 the children could identify and talk about what went wrong. This is what they said:



The difference:

- Children began seeking each other out to collaborate - even my quiet, not so outgoing children
- Resilient - happy for the tower to be knocked over because they knew they could do again - "Try, try again."
- Used language around sharing and taking turns sporadically, at this moment in the year they used gestures more frequently such as pointing.
- Children continued the activity over the weeks and could help other children by being the expert - "I can do it I show you."

Giving children a sense of autonomy and feelings of control

Environment	Description
Independent access to resources	Resources are organised so that children can access them independently
Avoiding interruptions Control of own timetable	The timetable is organised to provide children with the opportunity to choose and pursue activities guided by their interest and engagement
Involvement in decision making Meaningful choices	Children take part in decision making about what and how they learn. Choices involve higher levels of thinking (e.g., what resources to use, how to organize information, why to work with a particular partner)
Activities	
Child-structured play	Play initiated and controlled by the children
Control over challenge	Modifications and/or adaptations to the level of difficulty of tasks/activities and expectations regarding its product(s) are made by children, or negotiated between teacher and children (e.g., children work at their own pace, choose resources that fit with their interests and abilities).
Self-assessment Formative assessment of self & others	Children have opportunities to self-evaluate qualities of their work in progress, as well as the end of projects, and can determine next steps/adaptations (e.g., What have I learned? How can I improve?)
Interactions	
Extending child-initiated interactions	Make careful observations of children's activities before intervening to extend their play or activity; follow the children's intentions and help them to extend their ideas by careful questioning and discussion
Supporting children to resolve social conflicts	When social conflicts arise, discuss the nature of the problem with the children and support them to decide upon solutions

Example: Involvement in decision making

WHAT DO I NEED TO DO TO HELP STAFF RECOGNISE THE POWER OF PLAY AND HOW DO I INVOLVE THE CHILDREN?

- Use our child consultation meetings to discuss with children.
- Use the children's current interest in Dinosaurs as a starting point.
- Meet with the Leadership team to discuss what the children are telling us want they want to do introduce
- Encourage staff to be brave and stand back and watch the magic unfold.



WHAT DID THE CHILDREN SAY?

STATEMENTS FROM THE CHILDREN'S PLANNING MEETING

- *"I want to draw dinosaurs go to the shop"*
- *"I want dinosaurs, the dinosaurs go 'roar'."*
- *I want a 'Jurassic park'*



Providing challenge

Activities	Description
Planning activities	Children are required to plan activities, including deciding on the resources they will need, what they need to do first, what is the goal of the activity, how to make sure it is done well; children organize activities themselves, without early adult intervention
Problem-solving	Problems are set related to children's current interests, possible solutions are discussed and children's suggestions are taken seriously and tried out
Adult-structured play	Play in which an adult sets a goal or participates as a co-player
Interactions	
Encouraging higher order/metacognitive thinking	Ask genuine, open-ended questions that require higher order thinking eg: why, what would happen if, what makes you say that?
Metacognitive language	Using and encouraging the use of metacognitive and strategic language to guide learning; engaging children in dialogue about thinking and learning processes.
Engaging in sustained shared thinking/genuine conversations	During 'episodes of joint attention' follow the focus of the children's interest and extend their experience by describing the nature of the experience, how it relates to other current and recent experiences.



**Example:
Problem solving**

An adult lifted
Jenna and Hafsa

into a
Barrel. They loved being in the barrel,
but I would not lift them in. They had to
work out how to climb inside the barrel
by themselves.



They built stairs out of blocks.

They realised that they had
To move the barrel closer and build the a
stairs higher.



When they had finished, they let other
children have a turn.

Examples: Engaging in sustained shared thinking



What happens when I add this? Why do you think this happens?

What else should I add?



Do you make smoothies at home?

What flavour smoothie is your favourite?

Do you like strawberry flavour?

Can we have orange and strawberry? Do you think that would taste nice?

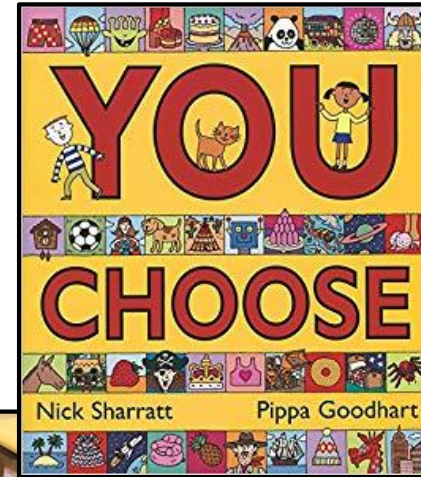
Supporting children to talk about their learning

Activities	Description
Talking about learning	Activities are organised which support children in reviewing and discussing what they have learnt or how they completed a particular task (eg: reviewing photos or a video of their activity; reminiscing about a previous activity; discussing what they like doing or struggle with; discuss ways of going about particular tasks/activities); adult models their thinking about undertaking an activity
Collaborative groupwork	Children are encouraged to play, solve problems or carry out activities in pairs or small collaborative groups; collaborative activities are designed to stimulate discussion (eg: making decisions or choices)
Peer tutoring	Plan for and encourage peer tutoring, where one child teaches another something that they know, or have been taught by an adult or another child
Interactions	
Reviewing tasks/activities	Either during or in review after activities, remind children of goals or learning intentions of activities
Discussing thinking and learning	Set up activities which encourage discussion and reflection on learning and thinking (eg: collaborative problem-solving tasks, peer tutoring, class discussion)
Modelling/Demonstrating	Conveying the sequence of actions needed to complete a task (through talk or action) and giving children the opportunity to view successful practice and task completion. Model a self-commentary, which articulates thinking and strategies.
Questioning	Using metacognitive questions to guide learning and invite children to find solutions to problems or answers to questions on their own, rather than telling them what to do and how to do it.
Guiding/scaffolding children to help them complete a task	Giving children formative, descriptive and task-specific feedback focused on the learning process so children can identify and reduce distances between current progress/performance and goals.
Feedback	
Motivational messages	Attributing success to effort and using effective strategies; emphasizing progress and growth; challenging children; and communicating confidence in children as learners

Example: Questioning; Guiding/scaffolding children to help them complete a task; Using metacognitive questions

You Choose

We started by reading the story 'You Choose.'
During the first week the children were encouraged to make choices; prompted by a different question on each page.
This was a good starting point, as it allowed me to model key language needed when making reasoned choices. (ie. I like/dislike/think this because....)





Children's Responses

Main findings:

- As expected children were keen to share their choices. However, giving explanations for their choices proved to be quite challenging for some of the children with less language and who were lower in self-regulation.
- Using language of opinion ie. I like/dislike because... was also quite challenging, as it is often subjective, making it difficult for some of the children to make reasoned decisions and choices.



Right let's turn the page. This page says,

"What kind of home would you choose to live in?"

Remember we are going to choose someone to have a go using the name stones. Let's see who is next... M. You can have a look at this page M and tell us where would you choose to live.

(M points to a castle on the page).

A: **I would like to go there too M.**

Let's let M tell us why she has chosen to live there first and then you can tell us why you agree with her.

M: **I like it because it looks nice and it has loads of rooms in it.**

It looks nice and has lots of rooms? Tell me, How do you know that it has lots of rooms in it?

M: **Because it has lots of windows on the outside.**

Yes it does have lots of windows. That's a good observation you have made there. Good choice M.

M: **-and I like it because it has lots of nice flags on it.**

Section 3.

The professional development program: action research

Teacher Professional Development

In the following sections a one year, whole school program is set out which supports the development of self-regulation in 3-4 year old children. Over the last 20 years many successful programs have been developed which effectively support children's self-regulation development. However, these programs have predominantly been tailored for older primary school and secondary school pupils.

To develop a program for 3-4 year olds an action research project was undertaken with three pre-school settings (a maintained nursery school, a nursery unit in a state primary school, and a social enterprise daycare nursery). This development study, and the program derived from it, both incorporate a number of features which have been shown to be required to ensure maximum effectiveness.

Key elements for successful programme roll out have been identified as reducing the risk of reducing impact when transferring programme delivery from the original research team to the professional teaching staff:

- *in-depth understanding* by professional staff of the nature of self-regulation and its significance
- *an extended time period for the initial introduction of the program* to give an opportunity for staff to discuss and clarify and develop their understanding of the key elements of a pedagogy which supports self-regulation in young children
- a whole school or setting approach
- *an action research approach* which involves the professional staff from the beginning to the end of the program in putting ideas into practice and reflecting upon lessons learnt from this exercise.

These elements combined ensure that all staff involved in developing the program within the school or setting fully understand the key ideas behind it, have the opportunity to discuss it and work with other staff to develop effective practice, and have a good level of commitment to carrying out the program to a high level of fidelity.

The Self-Regulation Course

This section sets out the details of the Self-Regulation course which should be carried out at the start of the program. This should ideally take place over the course of the first term of the year. There are 7 workshop sessions, for which a period of at least 3 hours should be allocated (could be split into 2 shorter sessions). These consist of:

- A powerpoint presentation setting out the research about the nature of self-regulation, its importance and development in young children, the role of play and oral language development in enhancing children's self-regulation abilities, and the aspects of the pre-school classroom which can support self-regulation development. *Links to these presentations are included in Appendix b.*
- Activities and discussions designed to enhance course participants' understanding of these various issues related to self-regulation development.
- Observation and analysis of video material illustrating aspects of self-regulation in young children. *Links to these videos are included in Appendix b.*
- The setting and discussion of a 'homework' activity to be completed by participants before the following workshop. These activities are designed to enhance participants' practical skills in recognizing aspects of self-regulation in young children, and in preparing, carrying out and reflecting upon practice designed to enhance its development. From workshop 2 onwards, each session starts with a review of the previous 'homework' tasks. In Sessions 5,6 & 7 this review includes presentations by participants of the Play/Language activities and Mini-projects.

There should be a period of 2 weeks between each of the sessions 1-6 to allow participants time to undertake the various homework tasks. There should be 3 weeks between sessions 6 and 7 to allow for a first trial Mini-project. The course concludes in Session 7 with the planning of a program of action research for the preschool to develop self-regulation enhancing practices during the remainder of the school year, and an initial focus for this work. Further meetings are organized through the remainder of the school year to support this program of action research within the preschool setting.

Outline of the course

Session 1: Introduction to Self-Regulation

- Powerpoint 1: Self-regulation in young children: what is involved?
- Video Activity 1: The 4 areas of self-regulation

Homework: Observation of 2 children; CINDLE Observation Sheet

Session 2: Using the CHILD 3-5 instrument

- Feedback & discussion on homework/observations
- Powerpoint 2: Why is self-regulation so important for young children's development?
- Examples of CHILD Statements; pairs discussion
- Video Activity 2: identifying CHILD statements

Homework: Assessment of 2 children; CHILD 3-5 instrument

Session 3: Supporting self-regulation development: language

- Feedback & discussion on homework/ CHILD assessments
- Powerpoint 3: How does oral language help children to become self-regulating?
- Discussion on support for language development: practice in participant classrooms
- Video Activity 3: identifying CHILD statements

Homework: CHILD 3-5 Class Audit completion

Session 4: Supporting self-regulation development: play

- Feedback & discussion on homework/ CHILD 3-5 Class Audit
- Powerpoint 4: How does play help children to become self-regulating?
- Discussion on provision for play: practice in participant classrooms
- Video Activity 4: identifying CHILD statements

Homework: Supporting self-regulation: Language Activity:: Choose an identified Language activity designed to support the children's self-regulation and record observations using the Language Observation sheet

Session 5: Developing pedagogical practices to support self-regulation 1

- Presentations & discussion on homework: Language activity
- Discussion on developing a Pedagogy for Self-regulation: practice in participant classrooms related to:
 - a) implications of research on play, language & self-regulation
 - b) Cindle categories for the classroom environment, activities and interaction
- Activity: work in small groups to allocate self-regulation practices to 5 aspects of a Pedagogy for self-regulation

Homework: Supporting self-regulation: Play activity: Choose an identified Play activity designed to support the children's self-regulation and record observations using the Play Observation sheet

Session 6: Developing pedagogical practices to support self-regulation 2

- Presentations & discussion on homework: Activity 2: Play activity
- Discussion of examples of specific practices to support self-regulation in the Nursery (Early Education Journal – see Appendix c)
- Activity: work in small groups to choose and analyse the pedagogy in one of the specific examples
- Discussion of development and planning of a mini-project

Homework: Supporting self-regulation: Mini-project activity: Identifying, planning and monitoring an area for improvement in practice with the children & facilitating their ideas.

Session 7: Planning for an Action Research Program and initial projects

- Presentations & discussion on homework: Mini project activity: Identifying, planning and monitoring an area for improvement with the children & facilitating their ideas
- Discussion of action research principles and program for remainder of year
- Projects: discussion of content of planned projects, timetable, school visits, group meetings, evaluation processes
- Discussion/feedback on this term's program

Homework: Decide on and draw up a plan for a first self-regulation project at the start of the following term.

Section 4

Putting it into practice

Projects

The initial mini-project carried out between Sessions 6 and 7 of the Self-Regulation Course, and subsequent projects forming part of the action research program, consist of the following elements:

- planning and carrying out an innovation designed to promote self-regulation, based upon a discussion with the children to identify their interests, and an improvement in practice
- recording and monitoring the progress of the project, and collecting evidence of self-regulated behaviour in the form of notes, photographs, artefacts or videos
- preparing a reflective presentation of the work carried out during the project, the children's responses, and evidence of enhancements and achievements in regard to their playfulness, oral language and self-regulation development. This presentation may take the form of a powerpoint presentation or an illustrated talk. It should be presented either within the preschool or shared with other pre-school staff at action research discussion meetings during the remainder of the school year. Examples of these presentations are included in Appendix a.

Documentation

During the course participants are introduced to, and practice using, the following documents to support the planning, monitoring, reflection and presentation of their projects.

1. a Project Planning sheet
2. a Project Monitoring sheet

These documents are set out in the following pages.

Data Collection

During each project within the program of action research participant staff can use a range of means of collecting data to record the work undertaken during the project, and evidence of the children's responses and development. These can consist of observational notes, transcripts of discussions between teachers, support staff and children, photographs and videos of significant activities or events, and records of children's individual progress (see CHILD observational instrument in Section 5).

These various forms of documentation and evidence are illustrated in sections 2, 5 & 6 of this Handbook.

Project Documentation**Project Planning Sheet**

Name School.....

My innovation will focus on

Why do I need to make this change/ innovation? What is happening at the moment?
Which aspects of self-regulation am I hoping to focus on? List CHILD Statements
What is my plan for practice to support this innovation? List Principles from Pedagogy for Self-Regulation Environment Activities Interactions
How will I make a start?
How am I going to involve the children in making decisions about this change?
How might the innovation develop?
How and when am I going to observe what is going on? What kinds of evidence am I going to collect of the children's responses?

Project Monitoring Sheet

Name School.....

Focus of Innovation

Week 1

Events (planned & unplanned)

Children's Responses

Records kept (transcripts, photos, children's products etc)

Week 2

Events (planned & unplanned)

Children's Responses

Records kept (transcripts, photos, children's products etc)

Overall Summary

Main successes

CHILD Statements achieved by children? Nature of evidence

Pedagogical principles most/ least effectively carried out in practice. Reasons for effective/ineffective practice?

Main difficulties/aspects to work on further

Lessons learnt for next project

Section 5:

Measurement of the children's self-regulation

The CHILD observational instrument forms a core part of the program. It is a teacher report measure which was developed in a previous large study and has been used and validated, in a range of UK and international settings, with several hundred children aged 3-5.

The 22 statements contained within it represent behaviours and abilities which most clearly identify the development of self-regulation in this age group.

Pre-school teachers are asked to indicate the extent to which the child has demonstrated each capability over recent weeks, ranging from Always, through Usually (more often than not) and Sometimes (observed but no often) to Never. In the comment section, they are also asked to give an example of an observed behavior illustrating this capability, where it has been seen.

This instrument provides a profile of the child over the 4 main areas of self-regulated behavior – emotion, social, cognitive and motivation and an overall self-regulation score. It provides useful information to the teacher, indicating where self-regulation support can most usefully be focused, and indicates the level of self-regulation achieved by the child and progress made since the last assessment.

The CHILD is scored as follows for each statement:

Always = 3, Usually = 2, Sometimes = 1, Never = 0
 Emotional, Prosocial & Motivation each score = 0 - 15
 Cognitive score = 0 - 21
 Overall score = 0 – 66

As reported in Section 6, during the development study, scores on the CHILD were shown to be sensitive to children's progress over a period of 7 months, and to closely relate to a range of observational and direct measures of self-regulation and related executive functions.

In the following pages some exemplars are provided of children's behaviours and activities illustrating the various self-regulation capabilities.

In Section 6 below, as further evidence of the progress made by children during the development study, some examples of their activities demonstrating self-regulation are also provided.

For more information about the development of the CHILD observational instrument see:

Whitebread, D., Coltman, P., Pino Pasternak, D., Sangster, C., Grau, V., Bingham, S., Almeqdad, Q. & Demetriou, D. (2009) The development of two observational tools for assessing metacognition and self-regulated learning in young children, *Metacognition and Learning*, 4(1), 63-85

Checklist of Independent Learning Development (CHILD) 3-5

Name of child: _____ Teacher: _____

Date: _____ School/setting: _____

	Always	Usually	Some-times	Never	Comment
Emotional					
Can speak about own and others behaviour & consequences					
Tackles new tasks confidently					
Can control attention and resist distraction					
Monitors progress and seeks help appropriately					
Persists in the face of difficulties					
ProSocial					
Negotiates when and how to carry out tasks					
Can resolve social problems with peers					
Shares and takes turns independently					
Engages in independent cooperative activities with peers					
Is aware of others feelings & helps and comforts them					

	Always	Usually	Some- times	Never	Comment
Cognitive					
Is aware of own strengths and weaknesses					
Can speak about how they have done something or what they have learnt					
Can speak about planned activities					
Can make reasoned choices and decisions					
Asks questions and suggests answers					
Uses previously taught strategies					
Adopts previously heard language for own purposes					
Motivation					
Finds own resources without adult help					
Develops own ways of carrying out tasks					
Initiates activities					
Plans own tasks, targets & goals					
Enjoys solving problems					

Exemplars of CHILD statements

Statement	Exemplar Event	Description
EMOTIONAL		
Can speak about others behaviour and consequences	Warning about paper clips	Three children are playing in the workshop area. A girl that appears to be leading the game is explaining the rest of the group how dangerous paper clips can be, modelling the correct way of using them
Tackles new tasks confidently	Counting to a 100 Making big sums Counting backwards Counting forever	A sequence of events representing a clear progression in the way children spontaneously set up and solve increasingly more challenging mathematical tasks after being provided with enough cognitive structuring by the teacher.
Can control attention and resist distraction	Fixing a bike	A child has entered the workshop area and has decided that he is going to fix the bike that has been placed as part of the setting. The child remains on task for an extended period of time using different tools and checking the outcomes of his actions.
Monitors progress and seeks help appropriately	Building a bridge	A group of children have decided to build a bridge to get to a castle but the bridge keeps falling down. The 'builders' actively seek the advice of other children that stop in front of the construction to see what is happening.
Persists in the face of difficulties	Finding the screwdriver	A girl has entered Santa's workshop area. She is looking for the screwdriver to make some toys. She actively looks for it and asks for the other children's help. After 15 minutes where she appears to have been engaged in other activities, she finally finds it. 'I found the screwdriver!'
PROSOCIAL		
Negotiates when and how to carry out tasks	Planning the game Playing in small group	A group of children have been encouraged to create a game using a hoop and a ball. The children actively discuss who is going to hold the hoop and who is going to throw the ball. They all agree they have to take turns. 'Otherwise it wouldn't be fair' says one of the children. They try out the game before teaching it to the rest of the class.
Can resolve social problems with peers	Negotiating number of children	Too many children are in the workshop area. A child becomes aware of the situation and acts as a negotiator trying to determine who can stay and who has to leave. He uses different questions to solve the problem: 'Who doesn't want to be here?', 'Who's been here the longest?'
Shares and takes turns independently	Taking turns	A group of girls are playing a lottery game. They spontaneously take turns asking: 'Whose turn is it?' and reminding each other: 'It's your turn now!'
Engages in independent co-operative activities	Three Little Pigs crisis	Children are playing Three Little Pigs in the role play area. A 'crisis' has been introduced. The Big Bad Wolf has stopped the electricity getting to the house. The children are

with peers		exploring using torches and working out what to do.
Is aware of feelings of others; helps and comforts them	Making cards	A girl helps a boy make a card. She doesn't 'do' it for him but has been asked to show him what to do. During the sequence she is very helpful and 'keeps an eye on him'. She does not take over, yet seems to take pride in the helping process.
COGNITIVE ELEMENTS OF INDEPENDENT LEARNING		
Is aware of own strengths and weaknesses	Counting beans with Jack	A girl is counting beans using a puppet (Jack). Being aware that there are too many beans to count, she decided to put some of the beans away so Jack can 'count them better'.
Can speak about how they have done something or what they have learnt	Drawing a fire	Two boys sit side by side at the drawing table and discuss how to draw a fire. One says it is a zig-zag shape and draws an example, saying that his mummy told him it was like this. The other disputes this and says it goes little and then very big, drawing small downward lines and long vertical lines. They talk about how fire is spread and how the flames move.
Can speak about planned Activities	The castle	Two girls have decided that they want to make a castle in the play area. Being prompted by the teacher's questions they verbalize what they want to put in the castle, the materials they need and what to do first.
Can make reasoned choices and decisions	Writing an animal story	Two boys collaborating on a story decide between them that they want it to feature a particular animal so send someone in search of a picture to copy.
Asks questions and suggests answers	Skeletons	A group were interested in skeletons, and the Nursery Nurse helped them to draw around one another and copy pictures from books to fill in their skeletons. The children felt the bones in their bodies as they drew. They asked questions about the bones and in some cases one child answered another's question.
Uses previously taught strategies	Peer support in writing	Two boys support another with his writing when they see him struggle. They communicate clearly, using strategies they have heard from their teacher, and are sensitive to his feelings.
Adopts previously heard language for own purposes	Writing messages	Two girls help a boy who also wants to write. They track what he is doing and point to an example of a message (written by a child) on the wall and draw attention to the individual letters, naming them for the boy.
MOTIVATIONAL ELEMENTS OF INDEPENDENT LEARNING		
Finds own resources without adult help	Goldilocks and the three bears	The children have decided to recreate the story of Goldilocks and the three bears. They have found three boxes of different sizes for the beds, three bowls and spoons for the bears and a pot to cook the porridge.
Develops own ways of carrying out tasks	Making computers	Two children decide to make a computer out of a cardboard box. They work collaboratively together and persist when things don't go well eg: working out how to join the box (computer screen) to the table.
Initiates activities	Making books	One child made a 'book' by sellotaping together three small sheets of computer paper. She

		drew simple illustrations and asked her teacher to scribe the story for her. It was a perfect story: 'The cat was lost. The flower was lonely. The dog had no friends. The sun came out and cheered them all up.' The book was read to the class and by four weeks later half the class had made books using the same method.
Plans own tasks, targets and goals	Christmas wrapping	A group of children have turned the play area into Santa's workshop. They have decided that they are going to wrap presents; they have found resources, and they have negotiated their roles.
Enjoys solving problems and challenges	Building a bridge	The teacher has set up a problem: the children need to get a treasure located at the other side of the room, crossing a river filled with crocodiles. The children decide to build a bridge and they co-operate to achieve their plan.

Section 6

Children's progress during the development study

Examples illustrating children's activities relating to the CHILD statements

Emotional

Tackles new tasks confidently

It was H's first day in school. He tackled many tasks which were new to him. Although he was happy to try to walk along raised planks, when he reached the barrel he was noticeably worried about entering it. Nevertheless, after some thought he climbed through the barrel and slid down the attached slide.



Persists in the face of difficulties

A is trying to create a roadway joining the sandpit to the garage. The garage is on a table at some distance from the sandpit. He firstly tries to place a plank over the gap but it doesn't reach. Then he decides that he needs two planks but can't work out how to connect them. He tries several different and unsuccessful ways before running to the block area to fetch a small block. He places this under the area where the two planks need to join. He is delighted to find that he can now push his car the whole way across.



Prosocial

Can resolve social problems with peers

A child is trying to attach a trailer to a tractor in order to give his toy lion a ride. He asks a nearby child for help. This child goes to take the trailer to turn it around the correct way but the first child takes the trailer back. The second child says

“Okay” and sits back. As the first child struggles with the task again, the second child says “You need to turn it that way” indicating with his hands but not touching the trailer. He watches as the first child follows the instruction to turn but still has difficulty connecting the pieces.

“Do you want me to help you?” he asks. When the first child nods, he fixes the tractor and trailer for him, making sure to hold it in front of the first child at all times so that he does not upset him.



Prosocial/ Motivation

Develop own ways of carrying out tasks

Engages in independent cooperative activities with peers

Negotiates when and how to carry out tasks

Plans own tasks, targets and goals

A group of girls have been making paper chains, having been taught the technique by an adult. After a discussion amongst themselves, they decide to hold the chain across the room and attempt to jump over it, adjusting the difficulty by making it higher after each child has had a turn at any particular height. They sort things out as a group so that every child has a turn at holding the end of the chain and at jumping over it. They then decide to measure the chain against the area in which it is to hang, so that they can see if it is long enough to reach. Two of the girls go on to adjust the length of the chain, making it long enough to cover the space.



Cognitive



Safa continue to build her dinosaur.

'Are you building something?'

'Yes, I making a dinosaur, big one'.

'A big one?'

'Yes, I seen it at the Museum. With Mummy and Daddy. '



'It got tail, red one'. (Safa fetched a red cone to be the tail)



'It got long, sharp nose like this' (Safa snaps her hands together)



Cognitive:

Can speak about planned activities

Motivation



An adult lifted Jenna and Hafsa into a barrel. They loved being in the barrel but I would not life them in. They had to work out how to climb inside the barrel by themselves.



Jenna and Hafsa built stairs out of blocks. They realised that they had to move the barrel closer and build the stairs higher.



When they had finished, they let other children have a turn.



Motivational:

Enjoys solving problems and challenges



Evidence of children's progress using CHILd and direct measures of self-regulation

To establish that the CHILd instrument worked as a valid measure of the children's progress in self-regulation during the development study, a feasibility study was carried out by the University of Oxford as part of the development of this programme.

For the purposes of this feasibility study a sample of 10 children (later expanded to 15) was selected from each of the five preschool groups at the three pre-school settings taking part in the development study ie. A total of 46 expanded to 78 children. After suitable pilot work in Oxford nurseries, all children were administered a package of 5 direct measures of executive function, self-regulation and vocabulary at Pre-Test (November 2018) to establish how feasible the measures were for children of this age who came from (comparatively) disadvantaged neighbourhoods in London. The teachers also completed the CHILd and a different rating scale for each child assessing self-regulation and social development, the Child Self-Regulation and Behaviour Questionnaire (CSBQ), which had been previously validated and widely used in research.

After expanding the sample, the same measures were administered at Post-Test (May 2019) to see if children's scores had improved. Using the expanded sample at Post Test, two new measures of 'hot' (emotionally involved) self-regulation were added to the testing package as a deliberate comparison for the 'cool' tablet-based measures that were part of the original assessments at Pre-test.

All 4 of the CHILd subscales (emotional, prosocial, cognitive and motivation) and the overall score, together with all but one of the initial 5 direct tests, showed significant improvement over 7 months (November - May). The CHILd overall score also correlated highly with the CSBQ, showing that they are measuring more or less the same things. However the CHILd predicted one of the 'hot' direct tests of self-regulation, whereas the CSBQ did not. This led the Oxford team to conclude that the CHILd, with its four different subscales, comes closer to capturing a broad definition of self-regulation than any of the other measures.

In the absence of a control group, this small development study cannot show that the program was directly responsible for the sample children's improved self-regulation abilities. However children's gains on a range of other measures, in addition to the CHILd, are compatible with the view that the intervention improved children's self-regulation. This is a plausible hypothesis but it will require evaluation with a robust randomised control trial. The teachers' evaluations of the program, reported in the next section, are also highly suggestive that this is indeed the case.

Section 7

Teacher evaluations of the program

At the completion of the development study carried out to refine the program set out in this Handbook, the preschool teachers involved were asked to evaluate the program in relation to a number of questions. This section sets out a selection of their responses which illustrate the key strengths of this programme and some issues which need to be borne in mind by preschool teachers undertaking a program of action research to support young children's development of self-regulation.

1. Knowledge & understanding of self-regulation

A) Has the intervention improved your understanding of the nature and development of self-regulation in young children? And in what ways?

- The whole project has helped to deepen my understanding of what self-regulation is in relation to child development. I initially thought that self-regulation was synonymous with "good" behaviour and while inhibitory control does play an important role in the development of self-regulation, it is not however the only component.
- I have come to understand that self-regulation is something which is strongly rooted in the field of psychology. Typically, children who are highly self-regulated are the ones who have started to develop their metacognitive thinking; an awareness of not only of *what* it is they have learned but also *how* they have learnt to do it.
- I have learnt that there are many ways of helping to develop self-regulation in children and this can start from when they are babies. Language is vital in helping to promote self-regulation both in how the children use language and how practitioners are using it. Practitioners can play an important role in helping children to start reflecting on their learning and developing strategies for achieving things which can be reapplied in order to be successful in different situations.
- I have a much clearer understanding of Self-regulation and understand the Importance of supporting children to be self-regulating. In particular the role of the practitioner in supporting children whereby they actively engage and are happy to take risks
- Familiarity with the CHILD list and the pedagogies for self-regulation has helped me to identify and develop key moments in children's learning.
- The Intervention has also helped me to look out for ways to promote self-regulation in a wide range of situations, not just In pre-planned activities.
- The Intervention has helped me to think about responding to children more creatively and to attempt to build more challenge Into planned and unplanned activities
- It has also helped me to celebrate and develop children's steps towards self-regulation which I may not have previously been valued as highly as they deserved to be

- I now have a deeper understanding of how key self-regulation is to every aspect of children's development
 - Putting the training into action through both the projects and through doing observations has made me more conversant with the CHILd checklist contents. I now know what to look for and what to promote/facilitate when working with the children, in order to enable them to be more self-regulating. It has also improved my vocabulary, in the sense that I find it easier to talk with others about why we do what we do. This is particularly useful with parents who need to understand why the nursery can appear unstructured and lacking in rote learning.
 - Yes, 100%. There is widespread confusion on what 'self -regulation' really is. My understanding of this prior to being part of the project was that self -regulation was to be able to regulate your feelings and that it can be defined as the ability of children to manage their own behaviour and aspects of their learning. From my research before embarking on the project it was thought that children developed their metacognition skills around the ages of 8 & 10 years. Again, this has been challenged as results and evidence from the activities our 3 year old children participated in informed us that they are very able to regulate their learning strategies from a young age.
 - I now consider metacognition as a pathway for facilitating children's understanding of when and how to apply executive function by enhancing their understanding, learning, and agency. Metacognition I believe is the knowledge, monitoring and control of one's cognition. For example, whilst watching a child build a tower, the child checks the models and structures of his peers (monitoring) and makes any needed adjustments to his construction (strategic control). I understand that executive function is a set of abilities— inhibitory control, working memory and shifting—which allow individuals to process information in a goal-directed, context-appropriate way.
- B) Which elements of the intervention were most useful in helping you to develop your knowledge and understanding?
- There were many aspects of the project which helped to deepen my understanding of self-regulation. The thing that I found was most effective in helping me to understand the basis of self-regulation was the mental maths exercise which we did at the beginning of the course. This helped me to have a better understanding of the metacognitive thinking element behind our learning and how being aware of these processes and being able to articulate them can have a huge impact on our understanding and the way in which we approach new learning situations in light of this understanding
 - I found that the videos and examples that were provided in the presentation at the beginning of the project were very helpful in highlighting the different areas of self-regulation. This was supported by the use of the CHILd statements document.
 - The video observations were very insightful. They showed clearly the elements of SR.
 - The Intervention started with a good basis of theory around SR and gave me a good grounding before we had to do our own projects.

- Having the opportunity to do observations and assessments using the CHILD statements was very valuable as it enabled us to consolidate our understanding up until this point. It allowed us to put the theory into practice before planning our interventions.
- Addressing the misconception that self-regulation is just about behaviour
- The video game on identifying behaviours demonstrating CHILD statements showed how children's behaviour could be interpreted in multiple ways and helped me to identify the key aspects of behaviour I saw.
- Explaining to other members of staff following the twilight session was also important for clarifying my own thinking
- Implementing the projects involved tricky decisions and judgements which provided a steep learning curve
- The presentations of other participants were also very helpful in demonstrating how self-regulation could be promoted in early years settings
- The early discussions in the group were helpful in developing my understanding. Examples were talked about as they arose naturally
- Explaining the CHILD statements to my room team helped to embed the knowledge in my own mind
- Doing the projects added to my understanding, as I could see how to help the children to develop skills they could use to further their own learning and self-esteem
- The meetings and discussions help me greatly as it helped me to think on a deeper level. One of the significant discussions was the processes of executive functioning and cognitive control and how they link to the pre-frontal cortex, and how the crucial developments in basic cognitive functioning have implications for later development.

2. Supporting self-regulation in young children

- A) Which pedagogical strategies did you find most effective in promoting self-regulation in the children in your class?
- Articulation of Learning - Peer Tutoring - Plan for and encourage peer tutoring, where one child teaches another something they know, or have been taught by an adult or another child.
 - Articulation of Learning - Collaborative Groupwork - Children are encouraged to play, solve problems or carry out activities in pairs or small collaborative groups; collaborative activities are designed to stimulate discussion.

- **Cognitive Challenge - Encouraging Higher Order/Metacognitive Thinking** - Ask genuine, open-ended questions that require higher order thinking, Eg: Why, What would happen if, What makes you say that?
- Cognitive Challenge - Adult Structured Play - Play in which an adult sets a goal or participates as co-player.
- Articulation of learning - discussing thinking
- Supporting autonomy
- Peer tutoring flowed naturally from more experienced children explaining the rules of cooking to newer children
- Explicit rules and procedures for new activities helped support children to be Independent
- Regularly re-organising the classroom so that resources were easily available also supported children to be Independent
- Encouraging children to talk about what they had done and the choices they had made in our daily group time was also powerful for encouraging children to think about their own learning
- One fortunate side effect of my class becoming part-time has been that the classroom does not have to be cleared for lunch. This has allowed us to give children more time in which to develop creative projects in particular. They can leave things and come back to them. Something that was a problem one day can be solved the next day with fresh eyes and adults can intervene less.
- I think giving children time to talk and to think is essential. Once children know that they have an attentive, interested adult, they begin to put their plans into words. The private talk becomes shared and it is therefore easier to help the child to expand upon their ideas and to try them out in a safe space. I am also more conscious of giving children enough opportunities to try out newly-learned strategies in lots of different contexts, so that they can call upon them in times of need
- The strategy I believe helped is keeping the children's current interest at the heart of what we provide. Involving children in decision-making and consulting with them on activities and following through with their requests supports their autonomy

B) What evidence do you have that they were effective?

- One of the main reasons I felt that these pedagogies were promoted most effectively was due to the fact the children were really excited by the activities, particularly the ones where they were working collaboratively with others and also the investigative ones. This was not necessarily because they were new activities but more due to the fact that the children were being encouraged to reflect on the learning more and because they were encouraged to approach the tasks in ways they might not usually do so. For example with the peer tutoring both children clearly benefitted from this as the children being tutored usually plays

independently and the child tutoring was able to articulate her learning, helping her to start developing the ability to reflect on her own learning

- When observing the children in their everyday play, there were clear examples of them using some of the skills and strategies they had been exploring through the interventions, particularly with regards to the pro-social
- Children are encouraging and supporting other children to take part in new and challenging activities
- They achieved a high level of independence when making sandwiches and other cooking activities
- Children are increasingly able to talk about their experiences and activities during our afternoon group time
- Videos of co-operative play that were shared with the children for discussion
- Higher levels of engagement and participation from children who previously would not have joined in the activities.
- I find myself writing more and more observations which include elements of self-regulation. Today, for instance, I observed one child speaking about his planned activities and another using language I had modelled recently in a game of his own devising. With the possible exception of the new children and children with special needs, most of the children in the class are demonstrating many of the CHILD statements on a daily basis.
- From observing the children and listening to their conversations it was evident that the strategies were successful as they engaged in achieving their learning goals. Making the learning visible and giving children time to discuss their approaches to their learning supported the children's metacognition and executive function work effectively to support their agency.
- Our Yoga teacher has noticed a marked improvement in the children's ability to follow instructions and their improved speaking & listening skills

C) Why do you think these worked well with your children?

- I think the use of collaborative problem solving and investigative activities were particularly motivating for the children as it creates an environment whereby children and adults are working together as co-learners. This is something which children often enjoy but also helps to create a warm learning environment where everyone is learning together.
- Some children have very limited experiences but they are able to express themselves at Nursery. A child who was inspired by a weekend visit to the Natural History Museum was able to create her own big-scale model dinosaur because she knew how to access a range of different materials

- Children who are 'babied' at home need encouragement to take the initiative and make their own decisions and choices instead of waiting for direction from an adult
- Many children are reluctant talkers, so creating the expectation that they will talk about their day everyday helps them to speak more confidently
- Using photos and quotes for displays - so that the children used them for reference
- I refrained from telling the children what to do and allowed the children to discover for themselves
- The children revelled in failure. They looked at it as an opportunity to fix/use a different method
- These strategies work well because the children themselves subconsciously understand their value. They are happier and more confident when they act in a self-regulating manner and so they want to repeat the experience. More children than before are coming to me and telling me with pride that they have managed to do something that they could not previously have done without help. They also understand that I will be as excited about this as they are, which adds to the joy!
- I believe that through discussions with the children and developing together clear learning goals they were able to effectively apply their metacognitive strategies
- Using metacognitive talk. Some of the children were saying out loud what they are thinking while they are carrying out a task. E.g. Jack uses this technique regularly e.g. 'first I am going to draw a circle and then a line'. Talking out loud helps Jack to focus and monitor his cognitive processing as well as helping him to develop a deeper understanding of his own thinking processes.

3. Impact of the intervention

A) Which aspects of self-regulation improved most clearly in the children in your class

- Can speak about how they have done something or what they have learnt, Enjoys problem solving, Monitors progress and seeks help appropriately
- Confidence, Accessing resources, Collaborative play, Independence, Engagement, Initiative
- There are elements from all four categories that have noticeably improved. Children are tackling new tasks confidently when previously they would have asked for help or not tried. Once engaged in a task, they also deal with problems better, persisting in trying to solve them rather than giving up. They are taking on board ways that have been modelled or suggested of resolving social issues with their peers. They are better at telling us about both their plans and their achievements

- The children loved the problem-solving aspect of SR, as they were given much more control and made decisions. They enjoyed trying out their own ideas - talking about whether it worked or not.
- The children began to seek each other out and work co-operatively, they valued each other as a resource that could be accessed.
- I believe that the children's ability to listen and speak about how they have done something or what they have learnt has remarkably improved. Jack again can articulate what he is going to do and how he is going to do it. He has a stutter which many would think would discourage him from expressing his learning but in fact it clearly shows his working memory is in play helping him in developing strategies to support his learning.

B) What evidence do you have for that?

- This was made evident through the observations made during the interventions and afterwards. Children were being encouraged to reflect on their learning more and were therefore becoming more confident in being able to do so.
- This process of self-reflection also helped to promote other areas of self-regulation. After taking the time to reflect on their learning children were then able to take what they had learnt and reapply this in different situations. You could see that they were monitoring their progress and persisting more in light of this new skill they had learnt
- The children were also highly motivated by the activities which involved a shared problem for them to solve and appeared to clearly enjoy them
- Child 'J' looking for a friend to build a box tower; Child 'A' trying different ways to seal his shaker; Child 'M' getting a plank of wood to climb up to reach a height.
- Photographs of trips geared around Individuals children's needs and interests
- Photographs of cooking and independent play
- Levels of engagement visible in the settings
- Our Yoga teacher reports a remarkable change in the children's ability to listen and follow instructions. She has remarked that since participating in the project the children are more able to resist distractions and seem to be able to focus the children seem to be present and are able to concentrate and focus on their breathing

C) What were the highlights for you of your work and the children's responses to your projects?

- The highlights of my work with the children during this project came when there were moments of high self-regulation occurring between children without any adult intervention. Many of these situations can occur through everyday problems but practitioners might not always see them and use them as a way of promoting self-regulatory skills. An

example of this was when I played the bingo game. The problem was posed by the adult, in that there were only enough boards for the children to have one between Two. To avoid conflict I could have told the children how best to play the game fairly with one another but instead this time I had left the children to work it out for themselves. The solution was therefore worked out by the children who managed to come up with a plan for taking turns

- The task where the children had to build a house for the dinosaur also helped to demonstrate this idea further. I set the task and stood back completely for what would have normally felt like a huge amount of time. The children being left to solve this problem without adult intervention was crucial to its success of promoting so many areas of self-regulation.
- Seeing children begin to talk freely on trips planned to encourage and engage them, for example, taking Zaydan on a bus and taking Harith to find his own house.
- Working with a quiet and reluctant child who then went on to make a bold pineapple shaker
- Listening to a child who was scared of failure and had a negative view of what he was capable of - his wise words afterwards were "try and try again"
- Increase in engagement throughout the class
- Children becoming leaders amongst their peers, for example, Jenna explaining how to make pancakes to her friends and staff members
- Children being keen to share sandwiches and food they had made with peers and staff
- Children collaborating when playing Instruments and singing and dancing
- Children demonstrating confidence in new situations such as the Woodlands School and workshops
- It is always a pleasure to see children's delight in their newly-found abilities and confidence. I know that these children have gained strategies that they will be able to use throughout their lives which should lead in turn to more fulfilled and successful adulthoods. On a more short-term level, the children are coming in excited to learn and to contribute to the well-being of their peers. They expect to be able to lead the play and learning, which is as it should be.
- Through listening to the children establishing their own learning goals and watching them find their motivation to initiate them, I found that they were more likely to persist through difficult learning tasks when they mastered skills they were very proud of, thus building upon their self-esteem and self-confidence. This also gave them a sense of themselves as teachers for the younger children
- Children displayed multiple learning strategies across tasks and could adjust those strategies as needed to facilitate their progress towards their desired goals. This is shown when Macsen was creating the Dinosaur block play. He observed what the other children were doing, created a small section and checked again with his peers to see if he was on the right track. Once confident he could then immerse himself in the shared goal

- I enjoyed witnessing the children take on responsibility by monitoring their progress towards learning goals, after setting them and planning ahead they independently motivated themselves to meet their goals, focus their attention on the task at hand, and used learning strategies to facilitate their understanding of materials.
- It was also very significant that I found self-regulated learners like Jack did not try to accomplish every task on his own, but rather frequently sought help from others and would ask the children and adults lots of questions. The teachers promoted positive help seeking behaviors by giving the children feedback on their progress e.g. 'I like the way you helped your friend remember what animal he is, can you help me remember?'

4. Lessons for the future?

A) Any thoughts on how to improve the course?

- Having more 'breathing space' between projects
- My only difficulty with the course has been the pressure of time and I am not sure that there is an answer to that. The course has been both enjoyable and thought-provoking
- Perhaps more time for the projects to take place or spaced out over a longer period.
- A project to be undertaken per term so that they could be manageable - also this could allow practitioners to develop a better understanding of how to develop SR in each of the terms
- I think that the content of the course is fantastic. I felt that we had developed a good understanding of self-regulation through all the work we had done during the first part of the course. Good mix of theory and practical which is always very useful.
- I think the main issues is around time pressures with regards to how long we had to carry out the projects. Many of them would have been more successful if we had more time to do them. Most importantly timing/suitability for the children.
- Trying to carry out assessments using the CHILD statements is difficult with new children. It was also very difficult to carry out some of the things planned for the projects due to the settling in periods which are mainly September and January. Summer term would be much better for all.
- I have enjoyed this project immensely and have learnt a lot about how young children learn and to see them as strong capable learners. However, as an office-based manager I missed out on the middle part by which I mean I may have missed some 'wow moments' with children. I feel that for this project and others like it the teacher has to be 100% committed and champion the learning throughout the nursery

B) Were the Planning and Monitoring sheets helpful? How could they be improved?

- The planning and monitoring sheets both worked very well. The planning sheet was very helpful in getting you to focus on particular areas you want to focus on by listing the CHILD and Pedagogies. However I think that practitioners should only choose one or two of each so that they are really sure about what it is they are trying to promote and so not to over complicate things
- Yes, they helped focus the projects and also unpicking what occurred in terms of SR.
- They helped to clarify the key purpose of projects
- Yes, the sheets helped me to think through all the aspects of what I needed to do. They were fairly straightforward and easy to use.
- Yes, the planning sheets were very helpful but I found the monitoring rather time consuming. However, I understand that without them it would be difficult to analyze whether strategies were successful or not

C) What have you learnt that you will take with you into your work during the rest of the year?

- I feel that I would definitely like to try and use the CHILD statements to help inform my practice but I also feel that it would be a very effective tool to continue as a measure with the children we work with. I have found that using this throughout this project has helped me to feel more confident in being able to promote self-regulation and has evidently had a positive effect on the children I have been working closely with
- Have a go and be flexible. Your weekly plan is not set in stone
- Listen to what the children are saying (however long it takes)
- It was great to see other projects in other settings and share what worked well to promote self-regulation. It was inspirational
- I found the CHILD statements very useful, not only as a way of learning about self-regulation but as a tool to keep what is important at the fronts of our minds. I think they could be very useful in future staff training. Our plans for children should be based on targets like these for children and our provision should reflect this. I might never again have to explain why questions such as *"What colour is it?"* are not very useful.
- Take every opportunity to build on children's interests and what motivates them, even if you had planned something else

D) What advice would you give to teachers developing interventions to support self-regulation in young children?

- The most important piece of advice I would give to teachers developing interventions is to think carefully about the appropriateness of the intervention for the children you are working with. I have found that there are different CHILD statements and pedagogies that lead themselves to certain times of the year. For example. Pro-social first term. Language based ones in the final term
- Interventions were most successful when children were involved and felt empowered. Keep encouraging the children to reflect on what they have done or what they have learnt and what they would like to do. Allow the children to take ownership of their own learning!
- Be adventurous because the children amaze us in what they can achieve. It makes the learning that takes place much deeper and worthwhile
- Take the time to explain your interventions to your whole team. If they are on board, it will make your job much easier.
- Get stuck in and trust your instincts
 - Never say 'be careful' to a child trying something new - our anxiety can de-motivate children
 - Give children the time and space to work things out for themselves
 - Make sure any activities planned allow as many opportunities as possible for children to make their own decisions
 - Get the children out into new environments and situations
 - Make sure the children can reinforce learning by trying out new strategies in different contexts.
 - Let the children suggest the interventions!

Appendices

Appendix A : Example projects

Billy Hasnath: The Drains

Planning/ Rationale

- As a team we had decided that we wanted to encourage large scale mark making in our playground. We identified an area and chose to put up magnetic whiteboards. One area of concern was the drainage channel that ran underneath the boards and that they get clogged up with leaves, dirt as well as losing pens and other mark making tools.
- As practitioners we had decided to put some guttering and were looking through suppliers when we decided that it could be a good opportunity to ask the children what they thought could be done.

CHILD Statements addressed

- Emotional: Persists in the face of difficulties
- Motivational: Develops own ways of carrying out tasks, Enjoys solving problems

Principles from Pedagogy for Self-Regulation

- Activities
- Cognitive challenge: Planning activities, Adult-structured play

Interactions

- Providing structure: Visual prompts

Starting point

- Show the children a picture of the area and highlight the issue with drainage.

Involving the children in making decisions

- The children will help to look for options and then take a vote on what option to take.

Further possible developments

- Children may want to 'fix' other areas in Nursery.

Evidence of the children's responses and development

- Record responses in class discussion
- Take photos during activity

Tedrans



This corner had been identified to be changed into a mark making corner with whiteboards, although because of the drains we had an issue with rubbish collecting and pens being dropped.

Tedrans

Working with a group of children I asked them what they could do to fix our problem.

“Fix it, we need a builder”

Me: Why what could a builder do?

“He can stop the rubbish falling down.”

Me: So we need to look at a shop for builders

“Yes a builders shop”

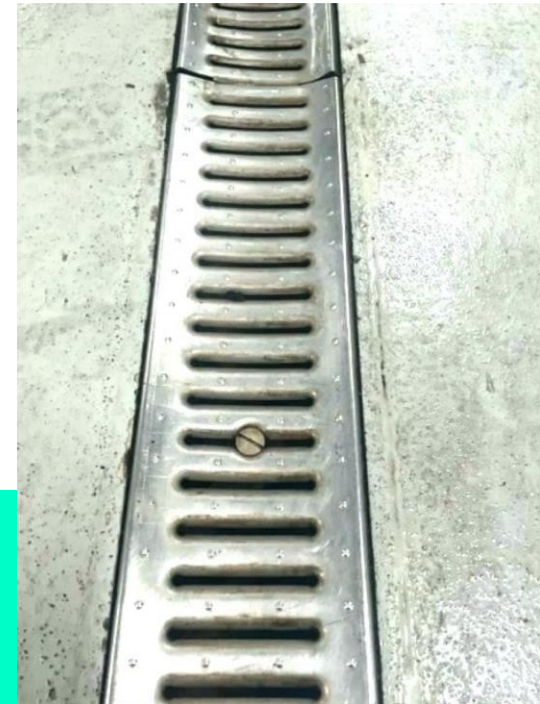
Me: What will we but from the builders shop?

“We need to stop it.”

Me: with a cover? A drain cover?

“Yeah a cover to stop it!”

So we did a google image search for drain covers and other key words like pipe and guttering. We printed off a couple of options and made a vote. They voted for the option with the stones. So we ordered some bags



The drains



The children were really excited as i told them we had a delivery in the car park and with their small wheelbarrows they brought over the bags of stone and started to fill the drain. When we finished we tested the drains with a hose. It still allows the water to run through but no more rubbish!

Judy Cox: Making Music

Planning/ Rationale

- Children to have daily structured music session and access to instruments
- Children to become children to become composers and conductors

CHILD Statements addressed

- Emotional: Can speak about others behaviour and consequences, Can control attention and resist distractions
- Prosocial: Can resolve social problems with peers, Shares and takes turns independently

Principles from Pedagogy for Self-Regulation

- Environment
- Feelings of control: children take part In decision making about what and how they learn

Activities

- Creating a community of learners - tasks, activities and assessment practices are open and flexible enough to accommodate diverse interests

Interactions

- Providing structure - Instructions are explicitly discussed and/or co-constructed with children. Instructions are clear and flexible and explanatory rationales are provided

Starting point

- Introducing a new range of instruments into continuous provision
- Teaching the children some games to play in a group

Involving the children in making decisions

- I will give the children choices over what instruments to play
- I will give children opportunities to lead the group games

Further possible developments

- In spontaneous play during continuous provision

Evidence of the children's responses and development

- Videos, photographs, transcripts

Making Music Project

— Self-Regulation and Music —

1: Passing a drum with an egg shaker round without moving the shaker

Hafsa: 'Oh no! Its falling again'.

Alisia: 'No - not like that!'

Sam: 'Put in middle, middle'.

Can speak about other's behaviour
and consequences



You have to watch other people



Shares and takes turns independently

2. Fish means go, bird means stop: in pairs and in a group

Can control attention and resist distractions



Stop go ('Look Judy, he's not joining in')



Can resolve social problems with peers

3.Spontaneous group play

Research shows that structured music activities lead to more spontaneous cooperative play. At the end of this Project, I found these children dancing together. They started in a small group, then involved more children.



Lydia Boudjemaa: Using Higher Order Thinking to Enhance Children's Learning

Focus

-Promoting higher order thinking as a way of enhancing children's learning.

Why?

-To equip children with the skills they need persist in the face of difficulties. To question why things might not have worked and to think of solutions.

Why at Old Church?

-At the moment we have found that children are keen to make models but often need support in choosing appropriate materials for what it is that they would like to make. They have found it difficult at times to see why their choice of materials have impacted on their ability to carry out their plan.

By the end of the innovation, I hope that I would have promoted the following CHILD statements:

-Finds own resources without adult help.

-Can make reasoned choices and decisions.

-Persists in the face of difficulty.

I will support this innovation using the following Principles from Pedagogy for Self-Regulation:

Creating a Community of learners- Co-constructing knowledge

Teachers and students are partners in learning and knowledge building.

Cognitive Challenge- Encouraging Higher Order/ Metacognitive Thinking

Ask genuine, open-ended questions that require higher order thinking.
Eg: Why, what would happen if, what makes you say that?

Feelings of Control-Independent Access to Resources

Resources are organised so that children can access them independently.

What is it made from?

I wanted to start by finding out what the children already knew about materials. We looked at a group of objects and spoke out what they were made from. The children described what the objects looked like and how they felt.



Let's sort!

After our discussion around the different objects, I then asked the children to help me sort them and put them in the boxes labelled 'Metal', 'Plastic' and 'Wood'.



Let's Label!





Children's Responses

Main findings:

- I was surprised by how well the children were able to describe the objects.
- The children could easily identify objects that were made out of wood and metal but less confident with plastic objects.



A: I've got a metal toy!

L: How do you know that it is metal?

A: Because it has got shiny mirror like that.

L: Oh so its shiny. That is one way of us knowing if something is made out of metal. A lot of metals are shiny.

L: What about this box. What do you think this might be made out of?

A: Glass!

L: Why do you think it is made out of glass?

A: Because I can see you through it.

L: That is a good guess. You're right you can see through it. But if this box was made of glass what do you think would happen if we dropped it on the floor?

A: It would break.

L: Yes that's right. Shall we drop this box and see what happens?

A: Yeah!

(Adult drops the box)

A: It didn't break!



A Paper Umbrella

I wanted to get the children to start thinking about why things are made out of particular materials. I posed lots of "What if?" to get them to starting thinking about it. We ended up testing out what happens to different materials if they are placed in water.



Children's Responses

L: We were looking at what materials different objects are made out of and it is important to think about what we choose to make things out of. Some objects wouldn't work very well if they were not made from the right material. Let's think about an Umbrella. What do we use an umbrella for?

S: So we don't get wet.

L: Ok well I have a piece of paper here. I think I might make an umbrella out of this piece of paper. If I made my umbrella out of paper. What do you think might happen?

I: It would melt.

L: Let's all have a feel of the paper now and then I am going to put it in the water and we can see what happens to it.

(The children touch the paper. Adult then places it in the water)

A, do you want to pick up the piece of paper. Does it feel the same.

S: Oh no. It ripped look!



Model Making



Our Village



Rationale

- ▶ Some of our 3 years old children are beginning to be aware of their own strengths and weaknesses, and so, find it difficult to make their own choices and decisions.
- ▶ Many find it difficult to persist in physical activities.
- ▶ They are prone to giving up if they can't learn new skills successfully thus losing their self-awareness and control of their own mental processing.



Which aspects of self-regulation am I hoping to focus on?

- ▶ **Emotional**
 - ▶ Tackles new tasks confidently.
 - ▶ Monitors progress and seeks help appropriately
 - ▶ Persists in the face of difficulties.
- ▶ **Cognitive**
 - ▶ Is aware of own strengths & weaknesses



What is my plan for practice to support this innovation?

Activities

- ▶ Supporting Autonomy
- ▶ Feelings of Control

Interactions

- ▶ Emotional Warmth & Security– Provide genuine interest and enthusiasm for each child giving praise for small achievements



How did I make a start?

- ▶ Met with the Leadership team to discuss what I want to introduce and discuss the correlation of Physical play and healthy emotion wellbeing and developing children's mental processing.
- ▶ Discussed with the children on how physical activities make us feel and introduce positive key words such as strong, resilient, capable etc.
- ▶ Asked them what it feels like when they have learnt a new skill.
- ▶ Organised physical activities in to planning and create small group sessions such as bike riding, energetic play, e.g. climbing frame or running and chasing games.



How did I involve the children in making decisions about this change?

- ▶ Consulted with them on their favorite types of outdoor play and what games we can introduce
- ▶ Asked them to think about how we can help learn from each other.



Children's Interest

- ▶ The children have shown an interest in transport and have been observed crashing in to each other in the garden. The teachers asked them if they would like to move like race cars which sparked excitement.
- ▶ The teachers set up an area and explained that it was a race track and they are all in race cars. They slowly introduced various instructions for the children to follow.



Traffic Lights

- ▶ number 1 – walk slowly”, “number 2 – jog”, “number 3 – run fast”.
- ▶ They also informed the children that the “green light = go and red light = stop”.
- ▶ Children enjoyed “beeping their horns” and “speed bumping – were the children jumped high”
- ▶ “zebra crossing – raising high knees on the spot”
“revving engines – sprinting on spot making rev sound” etc.



What happened next?

- ▶ The rules of this game were less complex and the children soon were adapting it by crashing and introducing the ambulance and police.
- ▶ However, our less experienced staff were inclined to intervene by asking the children to be 'careful' to stop 'fighting' causing the children to lose confidence in their ability to make decisions on how to extend the game.
- ▶ Some children were observed saying they didn't know how to play the game anymore.
- ▶ However, when I explained to the staff members the implications of their intervening in the children's play they began to notice that when the children were with other children they were less likely to doubt their ability, as they were copying the other children, gaining confidence in their abilities.



Yoga

- ▶ Children were encouraged to find a space and asked to follow the teachers instructions about how to move.
- ▶ Runner bean – run on spot
- ▶ Jumping bean – jump up and down
- ▶ Chilli bean – fold arms and act cold
- ▶ Mexican bean – jump in the air and shout “ariiba”
- ▶ French bean – say “ooh la la”
- ▶ Baked bean – lie down and sunbathe
- ▶ Beans on toast – do snow angle move on the floor.
- ▶ String bean – stand tall
- ▶ Broad bean – stand wide
- ▶ Frozen bean – stand still
- ▶ Jelly bean – shake off.



Children extending their learning.

- ▶ The children extended this outside demonstrating the actions learnt from the Yoga session.
- ▶ The use of visual prompts and adding the child's name also helped the children develop a technique for remembering.
- ▶ Children were later observed initiating the game with the younger children and when the younger children appeared dishearten at not knowing how to follow the rules they also introduced the children's names.
- ▶ They also extended this and made up their own game using various techniques for example 'wobble like a jelly'



What did we find?

- ▶ The most effective pedagogy was basing the games around the children's current interests thus allowing them to use creativity & imagination whilst engaging in games with rules.
- ▶ Their determination and not to give up was very evident as they felt confident and reassured by the adult who offered them support through visual quos.
- ▶ Seeing the children teach the younger children demonstrated that they were in fact learning to tackle new tasks confidently and were able to monitor their progress and seek help from their peers and adults and that they were learning to persist in the face of difficulties, thus having an growing awareness of their own strengths and weakness



The importance of Physical Play

- ▶ During physical play, children should have the opportunity to experience moments of failure and success, learning by trial and error. If not, they may lack the necessary confidence to overcome challenges in an autonomous way.
- ▶ It is of great importance that our children have the means and opportunities to develop positive self-esteem, curiosity and motivation about learning by providing them with regular physical outdoor activities.



Moyra Lajmir: Story Telling (The Gruffalo)

Planning/ Rationale

- At present, the children listen to stories more often in a formal key group setting than as a result of having requested them at odd points in the day. I believe the children would benefit from more informal story-telling throughout the day. They do not currently often build on their knowledge of the stories through other self-initiated activities. For example, children know the Cinderella story and like to dress up as Cinderella but that is as far as the play goes. I want to see them acting out stories or making story boxes or props connected to stories, or indeed any extensions stemming from their own imaginations. I am particularly interested in developing children's emotional self-regulation through these activities.

CHILD Statements addressed

- Emotional: Tackles new tasks confidently, Can control attention and resist distraction, Monitors progress and seeks help appropriately, Persists in the face of difficulties

Principles from Pedagogy for Self-Regulation

- Activities
- Supporting autonomy: Play initiated and led by children

Interactions

- Emotional warmth and security: Monitoring progress and providing encouragement.
- Feelings of control: Extending child-initiated interactions

Starting point

- Plan with the adults in the room team for many more *on the hoof* reading sessions, inside and outside.
- Talk about how we can scaffold children's thinking and enable them to first articulate and then carry out their ideas.
- Talk with adults about providing encouragement and challenge, so that children are rewarded for self-regulatory behavior, rather than for visible results.
- Talk with adults about gathering evidence in the form of photos and observations, so that I can put them together in presentation form.

Involving the children in making decisions

- I intend that the children shall lead this completely. Adults will merely be open to suggestions from children and facilitate them carrying through their ideas.
- We shall talk with the children about their favourite stories and find out from them how they would like to expand on them. The children will make the decisions about any materials, space, time etc. that they need. Adults will facilitate and document the learning

Further possible developments

- I am hoping that this innovation will aid not only the children but the adults. Any good practice developing in the form of supporting children's self-regulatory skills should be transferable to topics other than reading.
- The children should develop in self-confidence and in their own skills. They should learn to look upon mistakes as opportunities for learning. In time, They should be able to support each other more, tutoring each other in the skills they develop.

Evidence of the children's responses and development

- Written observations and photographs.

Ifraz and Ridwan wanted to read "The Gruffalo."

- At the end of the story, Ifraz asked
- "But where is Mummy Gruffalo?" Ridwan then continued
- "And Daddy?" "And baby?" "And sister?" "And brother?"
- They decided to make the Gruffalo family.
- The adult asked what they were going to use to make the family.
- They chose to use blocks.

Ifraz came up against a problem. At first he turned to the nearby adult, saying "It's wobbly." When she didn't respond immediately, he tried for a while to balance the block. Then he returned it to its place and chose one which was not slanted.



The boys seemed to be more concerned about having the correct number of figures than having ones of different sizes.





"Daddy Gruffalo needs eyes. See - they're orange."

The adult asked what they were going to use to make the eyes. When Ifraz said paint, they then looked for orange paint at the easel.

There was no orange paint, so there followed a discussion about how such paint could be made.

The adult offered the primary colours and suggested that mixing two of them might work. The boys tried a few combinations before finding the right one. They were very excited when they were eventually successful in producing orange paint.



They used their paint to create eyes for the gruffalos.



One boy couldn't wait for the paint to dry and decided to blow on it with a straw to speed up the process.



Having looked again at the book, Ifraz decided that the next gruffalo in the family should not look like wood.

"What can I use?" he asked.

The adult took him to look in the workshop area but he wasn't happy with anything there. Then she asked if he would like to try material. He looked at the selection available and settled on a brown material, having established that it was closest in appearance to the illustration.

The adult suggested leaving the rest of the task until the next day as we had run out of time. Ifraz carefully set it to one side and reminded the adult to make sure that no-one tried to put it away.

The Next Day



"It needs prickles."

He went to the workshop area and found some purple cellophane which he cut into prickles.



He attached the prickles using sellotape.



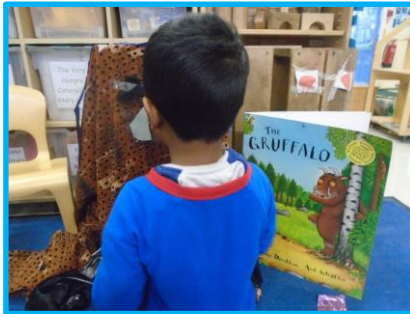
Then he cut a black tongue from sequin roll and eyes from long material that he rolled up.

At this point, Ifraz noticed that the adult had been taking photographs.
"I want to take a picture of my gruffalo" he said.



Ifraz's photograph

"Wait a minute - it's got no teeth!"



Ifraz added teeth that he cut from paper.



Ifraz was very proud of the work he had done over two days.



Over the following days, he opted for a lot of related activities, like this floor puzzle and acting out using props.

Further reading

Whitebread, D. (2018). *Children's Self-Regulation*. Sage Publications. Streaming video available at: <http://sk.sagepub.com/video/skpromo/adoebT/childrens-self-regulation?fromsearch=true>

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 Making decisions and developing metacognition (Shirley Larking)
 The significance of talk for young children's self-regulation and metacognition (Sue Robson)
 Social pretend play and self-regulation (Lisha O'Sullivan)
 Music and self-regulation in young children (Antonia Zachariou)

Whitebread, D. with Dawkins, R., Bingham, S., Rhodes, H. & Hemming, K. (2015) 'Our classroom is like a little cosy house!': Organising the early years classroom to encourage self-regulated learning. In Whitebread, D. & Coltman, P. (Eds.) *Teaching and Learning in the Early Years*, 4th ed., Routledge.

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Whitebread, D., (2010) Play, metacognition & self-regulation. In P. Broadhead, J. Howard & E. Wood (eds) *Play and Learning in the Early Years* London: Sage.

Self-Regulation Course Support materials

All materials can be accessed via this Dropbox link:

<https://www.dropbox.com/sh/q3gc4l8okng0txg/AAAYn174VUvM5wnzwfx5VXtza?dl=0>

<p>Session 1</p> <p>Handouts</p> <ul style="list-style-type: none"> CHILD 3-5 Statements CINDLE Observation sheet <p>Presentation</p> <p>Video activity –</p> <ul style="list-style-type: none"> Playing with Pixie Putting on the Jacket Sharing the scissors What are you going to do <p>Video activity Instructions</p> <p>Video Early Help Seeking</p> <p>Goldilocks story telling example</p> <p>Session 2</p> <p>Handouts CHILD 3-5 copy</p> <p>CHILD Statements examples</p> <p>Presentation – the importance of Self-Regulation</p> <p>Video Activity</p> <p>Instructions and Answers</p> <p>Answer sheet</p> <p>Session 3</p> <p>Handouts</p> <ul style="list-style-type: none"> CHILD Class audit copy Language and Self-Regulation Language activities <p>Video activities</p> <p>Answers</p> <p>Answer sheet</p> <p>Presentation Language and Self-Regulation</p>	<p>Session 4</p> <p>Handouts</p> <ul style="list-style-type: none"> Language Observation sheet Play and Self-Regulation Play activities <p>Video activities</p> <p>Answers</p> <p>Answer sheet</p> <p>Presentation Play and Self-Regulation</p> <p>Session 5</p> <p>CINDLE Pedagogical categories</p> <p>Implications play</p> <p>Implications self-regulation</p> <p>Implications language</p> <p>Pedagogy for Self-Regulation</p> <p>Pedagogy for Self-Regulation sheet</p> <p>Play observation sheet</p> <p>Session 6</p> <p>Early Education journal article</p> <p>Mini project planner</p> <p>Pedagogy for self-regulation sheet</p> <p>Session 7</p> <p>Project documentation</p>
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Credits

This Handbook represents the outstanding work of early childhood educators who participated as co-researchers in the pilot project which ran from April 2017 to April 2019.

Many thanks to them, their Headteachers, support staff and children, who participated so generously and magnificently in demonstrating how, given the opportunity and support, young children can be such powerful learners.

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Lynne Kelly at Bird in the Bush Day Nursery (LEYF Consortium)

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Self-Regulation course, action research program and Handbook devised and authored by Dr. David Whitebread, Retired Senior Member, Homerton College, University of Cambridge.

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