



National Day Nurseries Association



Maths
Champions

Coaching as an Educational Lead

Course Summary



Module 1: Introduction to Coaching

The role of the Maths Champion and Deputy Maths Champion is not only about identifying areas for celebration and improvement, but also about ensuring the whole staff team feel included and enthusiastic about the programme and wider mathematical learning and teaching. Ensuring that the whole team feel represented and supported is a key step in engaging them in this area of professional development.

Geist (2015) reports that:

“Many early childhood teachers feel uncomfortable teaching maths because they did not and do not like maths. Many also feel they are not good at maths leading to maths anxiety”

Many early years educators feel anxious about maths because of their own experiences. Coaching offers a supportive way to build confidence, reduce anxiety and improve practice.

Maths anxiety may affect confidence with:

- joining in with maths-rich play
- teaching mathematical concepts
- observing children’s maths development and planning next steps

What is coaching?

Coaching helps someone identify a goal, reflect on current practice and agree practical next steps. It focuses on the present and future, not blame or judgement.

A good coach creates a safe, trusting space where staff can make decisions, try new approaches and build confidence.

The GROW model

The GROW model gives a simple structure for coaching conversations:

- **Goal:** What do you want to achieve?
- **Reality:** What is happening now?
- **Options:** What could you try?
- **Way forward:** What will you do next, by when, and with what support?

Coaching vs mentoring

Coaching and mentoring both support learning, but they have different purposes:

Coaching	Mentoring
Task focused prioritising skills development	Relationship focus with a broader aim around personal development

Key activities involve training, assessing and providing feedback	Key activities involve providing information and suggestions to guide mentees
Aim to improve performance and develop skills	Aim to support and guide personal growth
Formal structure with planned monitoring and evaluation	Can be formal or more responsive with meetings planned as and when needed
Used to develop specific skills and performance	Used to guide personal growth and career development

Coaching skills

Effective coaching relies on four core skills:

1. Active listening

Listen closely to what is said and unsaid. Summarise key points to show understanding and keep the conversation focused.

2. Building rapport

Build trust by recognising staff interests, strengths and individual needs.

3. Skilful questioning

Use open questions that encourage reflection, discovery and purposeful action.

4. Constructive feedback

Recognise strengths and agree practical ways to improve. Keep feedback supportive and solution-focused.

Module 2: Establishing Strategic Direction

Coaching supports quality improvement by helping the team agree priorities, reflect on practice and take focused action.

Research highlights that high-quality early years provision and strong home learning environments can make a lasting difference to children's outcomes.

Two important factors for children's maths progress are:

- parents and carers encouraging play with letters, numbers, drawing and mark-making at home
- settings offering adult-led maths activities, such as number rhymes and games, alongside independent play

Self-assessment audits

When reflecting on quality practice, it is valuable to establish a baseline for where the setting currently is, before assessing where areas for improvement may occur. Reflective practice is an important stage of coaching and being able to reflect on individual practice, as well as with a wider team, allows you to establish a trusting, non-judgmental culture for motivation to impact change.

- **Learning Environment Audit**

The first audit will help you look at and critically evaluate the learning environment. We know that children learn and develop well in enabling environments, in which their experiences respond to their individual needs and there is a strong partnership between practitioners and parents and carers.

- **Staff Confidence Audit**

The second audit reflects on staff's current confidence in supporting children's emerging mathematical development. By assessing staff's current confidences, you will gain an insight into which areas staff feel most and least confident in and where your coaching support would have greatest impact.

Action plans

Action plans turn priorities into clear steps. They should show what will happen, who will do it, when it will happen and how impact will be reviewed.

- What are the key dates or deadlines?
- Are actions clear, specific and manageable?
- Who is responsible for each action?
- How will progress and impact be measured?

Use the CLEAR approach to keep targets focused and achievable:

- **Collaborative:** involve staff and share responsibility.
- **Limited:** focus on a small number of priorities.
- **Emotional:** connect goals to staff interests and strengths.
- **Appreciable:** break big goals into manageable steps.
- **Refinable:** adapt the plan when something is not working.

TOP TIP: The action plan template includes a reflection column which, as you work through the programme, will allow you to review the effectiveness of what is happening. Rather than just carry on doing things as they have always been done or sticking to your actions even if they aren't working, it is about reflecting on and questioning what is happening and why it is happening that way; then deciding whether there is a better, or more efficient, way of doing it in the future.

Module 3: Taking Effective Action

Effective coaching recognises that staff have different strengths, needs and motivations. Tailor support so each person can take part confidently.

When planning support, consider:

- what staff already know
- how they solve problems
- how they respond to change or conflict
- what motivates them
- what causes pressure or stress

Tools to improve staff practice and overcome difficulties

Maths anxiety counselling

Talk with staff about previous experiences of maths, identify anxieties and build from their strengths. Start with areas where they already feel confident and show how maths can naturally fit.

Skills mapping

Use audit results to identify staff strengths and pair people so they can learn from each other. Shared practice can build confidence and reduce resistance to change.

Review of your current planning

Review planning to check that children have regular, meaningful maths opportunities across the day and throughout the environment.

Training

Use training to build knowledge and confidence. Keep it accessible by offering short, practical opportunities such as:

- short team-meeting sessions
- shared webinars, podcasts or resources
- maths tips on planning sheets, room displays or staff boards
- celebrations of good maths practice across the setting
- focused CPD discussions during supervision

Coaching meetings

Use regular 1:1 or small-group conversations to discuss concerns, review progress and celebrate success.

Modelling and demonstration

Model effective practice so staff can see maths teaching in context, then discuss what worked and why.

Buddying/shadowing

Use buddying or shadowing so staff can learn from each other. Make sure buddies are supported and not overloaded.

Practitioner & peer observations

Use agreed observation and feedback processes so staff can observe, reflect and improve together.

Moderation

Moderation helps staff develop a shared understanding of children's maths learning and make consistent assessment decisions.

- look together at what children say, do and think
- agree next steps for mathematical learning
- build confidence and consistency in assessment

Reflective journals

Reflective journals help staff record thinking, track progress and plan next steps. They can be individual, room-based or shared as a team.

TOP TIP: Try adding top tips onto planning sheets, around the rooms or on staff notice boards, so staff are clear what their role is in relation to supporting maths in each area and also what to observe.

The **Core Activities** in **Step 7** provide a great opportunity to share some structured ways to implement maths learning in the environment, building confidence in understanding how maths opportunities can occur naturally throughout the provision, too.

Use the '**Bringing the team on the journey**' document in **Step 1: Initial Information** on the programme for further information on effective observations and constructive feedback.

Module 4: Evaluating Impact

Evaluation helps you understand what has improved, what needs to change and what the team should do next.

Outcome means a measurable change. **Impact** means the wider difference that change makes over time.

- **Outcome example:** staff complete more maths CPD hours.
- **Impact example:** staff use stronger maths interactions during play.

There are lots of ways that you can consider using the Maths Champions programme to evaluate impact and assess outcomes.

Self-assessment audits

At the end of the programme, you will be required to revisit the self-assessment audits to re-assess staff confidence and reflect on the learning environment to assess impact whilst participating in the programme.

Effective action planning

This working document will provide you with a visual tool to reflect on progress to meet achieved outcomes.

Training evaluations

Provide staff with evaluations so they can provide feedback on the impact of training or information and follow up with reflections for improvement.

Observations with staff

Ask staff about the impact for them, how are they feeling? Whether you are observing staff, talking to them at a coaching meeting, delivering training or discussing planning, take note of how they talk about successes or navigate challenges, and where they contribute their own ideas for improvement.

Monitoring quality of interactions with staff and children

Use written evidence from practitioner observations to show the impact on the quality of interactions.

Planning calls and inspections

As part of most routine Early Years Inspections, inspectors and leaders will engage in planning discussions which will explore how leaders have established strategic direction, how leaders and staff have taken effective action and how they evaluate the impact this change or action has had on the children.

Comments from parents and carers

Have parents noticed a positive change in the setting or shared something they have been inspired to try at home?

Reports from outside professionals

Perhaps you've had an external visit. Are there any comments about the positive impact of the programme or any effective practice in relation to maths?

Assessments of children's learning and development

Ensure children's assessments are up to date at the start of the programme and then revisit these to look for direct impact.

Case Study

At the end of the programme, create a short case study showing one change you made, why you made it and what difference it had. Include photos if helpful.

Use the case study to celebrate progress, share learning and identify priorities for future improvement.

Conclusion

Coaching helps Maths Champions and Deputy Maths Champions build staff confidence, support reflective practice and lead positive change across the setting.

By using clear goals, supportive conversations, practical action plans and regular evaluation, the whole team can improve mathematical learning for children.