8 Observing and assessing children’s learning and development

This chapter will enable you to understand:
• why we observe and assess children’s learning;
• what we can observe and assess;
• different techniques for observing and assessing children’s learning and development;
• assessment requirements in the Early Years Foundation Stage.

Introduction

Assessment is the way in which in our everyday practice, we observe children’s learning, strive to understand it, and then put our understanding to good use.

(Drummond, 1993)

When we watch children, watch them carefully and sensitively, we see them learning. When we approach observation of children with an open mind we can observe the richness of their play and interaction.

Through observation and assessment we can become aware of what children know and can do, and use this information to ensure that what we provide and how we interact is closely linked to their abilities and needs.

Observing and assessing children’s learning can also enhance our own knowledge and understanding of how children develop and learn. Detailed, careful, attentive observation, followed by well-informed assessment, can show us how children make meaning in their world, how they use and develop their language to enable them to communicate with others and to think. We can learn how they develop and maintain relationships, and how they develop emotionally and morally. This dynamic approach to observation and assessment enables us to go beyond the idea of normative developmental expectations and outcomes measures and enables us to really see, and celebrate, children as individuals.

Why is it important to observe and assess children’s learning and development?

We use observation all the time in our personal and professional lives. We are constantly aware of what is happening around us and, through assessments that we make of
situations, we adjust and refine our behaviour accordingly. For example, in settings, practitioners will notice when children have fallen over, they will notice that children have run out of glue, they will observe and monitor what needs doing as children tidy up. These informal observations are vital to the smooth running of the setting. Practitioners will also observe and notice the professional practice of colleagues to enhance their own practice. This might be informally; you notice that a colleague is working with children in an effective way and you observe her work as a model of how to do things well. It can also be done formally as professional development. For example, when areas for professional development are identified through appraisal practitioners can use focused observation of colleagues’ practice, alongside analytical discussion, to learn and develop their own knowledge and skill.

**ACTIVITY 1**

Think of some examples from your personal and/or professional life when you have observed another person with interest and the intention to understand what is happening.

- What did you do as you made your observation?
- What were you thinking as you made your observation?
- How did you come to a conclusion about what was happening and why?
- What were your thoughts about how you could change as a result of what you observed?
- How did you change?
- Did it work? What changes did you make that are now embedded in who you are?
- How did observation and assessment help you understand what was happening and what change you could make?

Observation and assessment is an effective way to understand children’s learning and development. Using observation in this way is good practice. Young children’s learning is evident in their play and interaction. It is through our observation and analysis of what we observe that we begin to understand the ways in which children make meaning in their world, and we come to know what they know and can do.

**Why observe?**

We observe children’s play for a number of reasons.

- To understand what individual children know and can do.
- To understand what individual children are interested in and how they learn best so that we can support their learning and development effectively.
- To support overall planning and provision.
• To match our approaches and interactive strategies to children’s needs to best support their learning and development.

• To further develop our understanding of how children learn, linking theory with practice.

The very best starting point for teaching children is to start with what they know and can do. Practitioners can establish this through attentive observation of children during their play. Careful observation and assessment will demonstrate to us what knowledge, skills and aptitudes children currently have and, therefore, what is needed to further support their learning and development.

An important part of understanding children’s learning is to observe what they are interested in. Where do they play? What do they play? Who do they play with? Which activities or experiences or themes engage them? Interest is an excellent motivator for children. When children are engaged in an activity or experience that is absorbing they are more likely to learn. We can use the information we gather through observation to inform what we do and what we provide. This ensures that we reflect children’s interests in what we provide. Another important question to ask is: how do children learn best? This will be different for different children. Children will have a preferred way to explore their world; it might be alongside other children or alongside an adult; it may be in group work or on their own; it might be by returning over and over again to an activity; it might be singularly focused on an activity; it might be working with the same schema through a variety of different activities and experiences. Through observation practitioners need to become aware of individual children’s preferences and, as with all other aspects of observation, ensure that provision caters for the children’s ways of learning.

Observation and assessment of children and their learning also inform overall provision. The best way to support children’s learning and development is to ensure that provision for both planned and child-initiated learning is closely matched to the needs of the children; both to meet their current needs and interests and provision that enables them to engage in activities and experiences that extend their learning. Observation should inform this process through careful analysis of the children’s needs and interests reflected in the provision.

Observation and assessment should also inform pedagogical approaches within settings and schools. When practitioners have a good understanding of what children know and can do and of their needs practitioners can adapt their interactive strategies to best support children’s learning and development.

CASE STUDY

Alex had been attending Nursery for about six months. At the Nursery practitioner observations of children are discussed at team meetings with the aim of adapting and matching their provision to the needs of the children. Alex’s key person went through her observations of Alex highlighting what she had observed, saying what her assessments of Alex...
were and asking the other practitioners for their views on Alex. Overall, both informal and formal observations showed that Alex had settled well and appeared to engage with and enjoy most activities. He appeared to particularly enjoy painting and spend some time at this activity each day. However, Alex’s key person highlighted the fact that a number of the observations showed that although Alex appeared to be part of the group and engage in many activities, for much of the time he was watching others play or playing on his own or choosing activities, like painting, that he could do on his own. The staff discussed these observations and agreed that Alex needed more opportunities to engage in play with other children, either as one-to-one or within a group. They agreed to adapt their pedagogical approach to support Alex’s learning. Over the next week Alex’s key person would play alongside Alex and encourage and model playing with other children. At the following week’s meeting they would review what had happened and, if necessary, continue to adapt their approach to meet Alex’s needs.

- How did the observation inform the practitioners’ pedagogical approach?
- In this situation what professional knowledge and understanding did the practitioners have to enable them to understand what they had observed?
- What did staff have to know about early years pedagogy to enable them to adapt their approach?

Observing children’s play and learning is an excellent way of enhancing professional knowledge. Children are endlessly surprising. If we limit our observation to collecting information to assess children against developmental norms and prescribed criteria we will miss so much of the richness of their play. Drummond (1993) articulates this well: if we choose to see only those aspects of learning of which we approve, we will lose the opportunity to see more of the picture, to learn more about learning ... there is always more to learn and more to see. By being attentive and open to actually seeing what children know and can do we can learn from them. We may make clearer connections between theory and practice; we may observe things that we need to think about and reflect upon in order to understand exactly what was happening; we may see things that confound our expectations about individual children and/or expected developmental progress and stages. All of this enhances our professional knowledge and skill and enables us to develop a more sophisticated understanding of young children’s learning and development.

Assessing children’s learning

There are different ways of approaching the assessment of children’s learning. At times you will need to do focused and purposeful observations so that you can assess a particular area of a child’s learning. At other times your observation will be open and fluid and you will assess what emerges from the observation. Both are valid ways of assessing children’s learning. Some examples of what you may find out from observation are:
• what children enjoy and are interested in;
• friendships;
• identifying specific learning needs;
• following up something that you have noticed informally and want to find out more;
• well-being;
• what a child is capable of within a particular area of development – physical, intellectual, language, emotional, social;
• which schemas children are developing;
• starting points for intervention;
• what a child knows and can do which will establish a child’s developmental progress/level;
• to get to know a child better – open-ended.

**THEORY FOCUS**

**Schemas**

Athey (2007) describes schemas as *patterns of behaviour and thinking in children that exist under the surface features of various contents, contexts and specific experiences.*

She goes on to discuss what this looks like in practice:

*You may have noticed children who seem to enjoy carrying out similar actions in a variety of ways, for example, a child who insists putting things in boxes, covering things up with scarves and hiding in dens. All of these may be an enclosure schema. Or, a child who enjoys playing with things that go round and round – wheels, cars and cogs, and whose paintings have a circular energy to them. This may be a child with a rotation schema.*

Observing, identifying and working with children’s schemas is one way of starting from the child. Schemas that are evident in children’s play are, according to Athey (2007), a reflection of children’s learning preferences and intrinsic brain patterns.

The notion of schemas as a way of understanding the development of children’s thinking arose from the Frobel Early Education Project. The project aimed, though close observation of young children, to:

• identify developments in each child’s thinking;
• describe the development of symbolic representation;
• identify curriculum content relevant to developing forms of thought.

The most significant finding of the project was the ideas of schemas as a way of understanding children’s thinking and learning.
Cathy Nutbrown has continued and extended Athey’s work. In her text *Threads of Thinking* Nutbrown (1999) highlights that Athey discusses children’s development (schemata) and argues that they can be identified in children’s drawings and are represented in children’s play, their thinking and their language (Table 8.1).

### Examples of schemas observable in young children’s activities/interests

<table>
<thead>
<tr>
<th>Schema</th>
<th>Observable activity/interest</th>
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| **Trajectory – vertical and horizontal** | Bouncing balls  
|                                 | Throwing and kicking  
|                                 | Climbing and jumping  
|                                 | Water play with pipes and gutters  
|                                 | Playing with running water from a tap  
|                                 | Marble runs  
|                                 | Climbing steps                                                                 |
| **Rotation**                    | Fascination with spinning machines i.e. washing machine  
|                                 | Play with toys with wheels  
|                                 | Fascination with keys  
|                                 | Rolling and spinning  
|                                 | Painting with large circular motion  
|                                 | Circle games                                                                 |
| **Transporting**                | Filling and moving objects in trucks and bags  
|                                 | Pushing other children in pushchairs and prams                                                                                 |
| **Enveloping and containing space** | Climbing into boxes  
|                                 | Filling containers  
|                                 | Covering themselves up  
|                                 | Wrapping dollies and teddies  
|                                 | Building dens  
|                                 | Painting whole sheets of paper one colour  
|                                 | Wrapping or covering items in craft activities                                                                 |
| **Connecting**                  | Train tracks and trains  
|                                 | Construction  
|                                 | Junk modelling                                                                 |

Table 8.1 Observable children’s schemas

Clearly, all areas of children’s learning and development can be assessed through observation. What is important is that that you approach both observation and assessment with the intention of finding something out. It is all too easy to find...
ourselves using observation and assessment to prove what we think that we already know rather than really focusing on what we have seen and analysing it with an open mind.

Assessment of observations requires a good understanding of child development and learning theory. It is this knowledge that will be applied to the observation as you analyse and interpret what you have seen and heard. It also requires that you have a good understanding of different observation techniques and when and how to use them to best effect.

Observation techniques

Different observation techniques need to be used to elicit different information. It is important that the information that you gather in your observation is appropriate and sufficiently detailed to enable you to make accurate assessments of children’s learning.

Selecting an appropriate observation technique to gather your information is an important part of this process.

Different techniques include:

- time sampling;
- tracking;
- checklists;
- target child;
- learning stories;
- documenting.

Time sampling involves completing a short narrative observation of a child at 10–15 minute intervals. This gives you quite a broad overview of the child in the setting. Assessment of the observation can be focused across many areas, as appropriate. The same technique can be used for activities. An activity is observed every 10–15 minutes. Again, this offers a broad range of possibilities for assessment.

Tracking observations follow children’s choices within the setting. These choices (including time children spent between activities and any time they spent observing others) and the time that the child spends there are recorded. You may also record who else was at the activity and briefly how the child engaged with the activity/experience. Again, this offers a broad view of the child in the setting and assessment can be focused on what you need to know.

Checklists are pre-determined lists that identify knowledge, skills or aptitudes. The purpose of observation is to ascertain whether a child can meet these criteria. These can be useful if you need to find out something particular and precise. However, generally checklists are not a sufficiently sophisticated enough way of capturing the richness of young children’s learning.
Target child observations are ones in which you identify a particular child to observe. You may be looking at something in particular or a completing an open-ended observation. In this observation the child is observed within the learning environment alongside other children. This gives the child the opportunity to demonstrate what they know and can do within their familiar environment alongside their peers. The activity that the child is involved in is briefly recorded narratively and then language and social interactions are recorded and coded to give an accurate account of what happened during the observation for analysis and interpretation.

Learning stories are a way of recording and presenting observations of children over time: building a narrative about their learning. They emerged from the work of Margaret Carr and are based in sociocultural theory. Carr (2001) articulates a way of recording children’s learning that acknowledges the context of that learning. She called these learning stories. The idea is to create a narrative, a story, recorded as a series of episodes linked together that record what the child knows and can do, and, records what comes next. This is important. The purpose of recording children’s learning in learning stories is to enhance their learning, to foreground what they can do as a starting point for providing for their ongoing development, and to recognise the complexity of the context and process of learning. The idea of a learning story is interpreted in a number of ways in practice. Some settings have formatted their observation sheets to create narrative threads linked to next steps in learning. Others have adopted a portfolio approach, in which observations and examples of children’s work are kept together to create a narrative of their progress in the setting. Assessment of children’s learning takes place at each stage of recording of the learning story in the analysis of the observation to define the next steps.

**Theory Focus**

**Sociocultural theory**

Sociocultural theory is a belief that higher-order functions, such as learning, grow out of social interaction. It holds that our learning processes are products of our society and our culture. Different cultures have different systems, such as beliefs, values, behaviours and practices, which provide a context for learning. Therefore, to fully understand someone we must examine the external social world in which that person has developed.

Vygotsky was highly influential in sociocultural theory. He described learning as being embedded within social events and that learning takes place as a child interacts with the people, objects and events in that environment. Learning is therefore socially and culturally defined.

Documenting children’s learning is another way of creating a narrative about what a child has done and achieved. Providing documentary evidence of children’s learning recorded through observations and examples of children’s work, usually kept as a portfolio or folder of which children and staff and parents can all contribute to, is well established in early years. Assessments of children’s learning can be completed through
careful analysis and interpretation of the documented evidence. The approach in the Reggio Emilia schools has been highly influential in developing this practice. The way in which the Reggio Emilia schools document their children’s learning focuses intensively on children’s experience, memories, thoughts and ideas as they work. Documentation in Reggio Emilia typically include samples of a child’s work at several different stages of completion; photographs showing work in progress; comments written by the practitioners working with the children; transcriptions of children’s discussions, comments and explanations about the activity; and comments made by parents. Observations, transcriptions of tape-recordings, and photographs of children discussing are also included. Examples of the children’s work and written reflections on the processes in which the children engaged are displayed in classrooms and corridors. This documentation reveals how the children planned, carried out and completed the displayed work (Katz and Chard, 1996).

It is important that in using different observational techniques to record and assess young children’s learning practitioners are clear about the purpose of what they are doing and that the observational and recording processes are matched to this aim. Also, that the process enables practitioners to have a good understanding of what children know and can do, and through analysis and interpretation of observation and/or documentation they are able to adapt and refine their provision and pedagogical processes to best meet the needs of the children.

ACTIVITY 2

Read through the different observational techniques outlined.

- Which observation technique, or combination of techniques, do you think would be best to learn about the aspects of children’s learning and development listed below?

- Think about timing? Which of these aspects of children’s learning and development do you think will need to be assessed over a period of time to ensure a valid assessment of their abilities and needs is made?
  - A child’s friendship group.
  - The schemas that a child is developing.
  - A child’s creative development.
  - A child’s well-being.
  - The development of a child’s language for thinking.
  - A child’s interests and preferences.
  - A child’s physical development.

- Give reasons for your decisions.

- Are there any other ways of observing and recording children’s learning that you are aware of that would be better suited to finding out about these aspects of children’s learning and development?
Observation-based assessment in the EYFS

Think about how your learning was assessed at senior school. For most subjects it would be through writing – perhaps essays or assignments or producing portfolios or written exams. This recording of what you know enabled your teachers to assess your learning. Young children do not yet have the skills to record their learning in this way. Young children’s learning is evident through what they do, what they say, and when they record their learning it is likely to be in idiosyncratic ways. Therefore, we need to match how we find out about what children know and can do to the ways in which they represent their knowledge, skills and aptitudes. Observation-based assessment provides this opportunity. In observation-based assessment practitioners observe children and then, based on what they have observed, make an assessment of the child’s learning and development. Observation allows practitioners to watch and make sense of children’s learning in a naturalistic and fluid way. When being observed children are able to demonstrate how they make sense and meaning in their world through exploration and interaction in a situation that is familiar, developmentally appropriate and predominantly child-initiated. This enables the assessment of learning to be sensitively constructed around individual children. At best, this model of assessment is child-centred and focused on what happens next to support the child’s learning and development.

ACTIVITY 3

• Think back to the way that your learning was assessed in senior schools. How did teachers assess what you knew and could do?
• What are your views on this way of assessing learning?
• Describe what is meant by observation-based assessment.
• Why is this the way that young children’s learning is assessed?
• Compare the two approaches.
• Who do you think benefits most within each approach? Give reasons for your response.

When observation and assessment of children’s play is done effectively it is done with compassion, recognising that the aim of observing children’s learning is to see a child as an individual with strengths and needs. All children will come into settings with different experiences. These experiences will have had a direct impact on their learning and development. For some children their experiences will have supported their learning and development and they will have knowledge skills and aptitudes that are within expected developmental parameters. Other children’s experiences will mean that they need time and opportunity to develop and learn within the setting before their development sits within expected developmental parameters. The purpose of observation-based assessment is to establish what children know and can do, and, to identify their needs so that provision and interaction can be matched to these needs.
This makes observation-based assessment useful and appropriate. Assessment of children for the sole purpose of levelling and labelling is neither appropriate nor useful in early years settings. Ascribing levels and labels does only that: ascribe levels and labels; it is a poor indicator of what to do next to support children’s learning and development. This is important. Assessment in early years settings needs to be predominantly formative, not summative.

<table>
<thead>
<tr>
<th>Definitions</th>
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<tr>
<td><strong>Formative assessment</strong></td>
<td>Assessment focused on producing information that is used to adapt provision to meet a child’s needs. This is often referred to as <em>assessment for learning</em>.</td>
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<tr>
<td><strong>Summative assessment</strong></td>
<td>Assessment focused on summarising a child’s learning and development at a particular point in time. This is often referred to as <em>assessment of learning</em>.</td>
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It is also important to be aware that, as practitioners, we make choices about what we observe and what we assess and realise that these choices indicate what we value in children and children’s play. It is almost always practitioners who select what to observe, when to observe and where to observe children’s learning, and we bring to that situation many assumptions about what is worthwhile observing. It is important therefore that we are aware of what assumptions and prejudices we hold about what constitutes worthwhile play and worthwhile activities and how this impacts on what, and how, and when we observe children. Where necessary we need to challenge these assumptions within ourselves and others to ensure that our observations of children reflect all of who they are.

We may also find ourselves only observing the easily observable, i.e. what children say and do. This is clearly an important part of observation but other aspects of who children are is equally important: their feelings, thoughts, attitudes and dispositions. How do we observe this? How do we ensure that our assessment of who children are and what they can do is holistic? To achieve this, observation and assessment needs to be multidimensional, in both content and perspective. In this way we ensure that our assessments of children have breadth as well as depth and reflect the complexity of young children’s learning and development. For example, practitioners may use the Mosaic approach (Clark and Moss, 2001) alongside a more traditional pattern of observation in order to include the child’s perspective on themselves, their world, and their learning. These combined approaches enable us to have a more holistic understanding of who children are and what they can do.

**The Mosaic approach to observing children’s learning**

The Mosaic approach (Clark and Moss, 2001) is a multi-method approach to bringing together children’s own views of their lives and their pre-school setting. It aims for children to be participatory in constructing an understanding of their lives.

The approach uses a range of ways of ‘listening’ to children to construct this understanding of their lives:
Observation. Children are listened to through observation based upon two questions: *What is it like to be here? and Do you listen to me?*

Discussion (child conferencing) with the child. This is based on a framework of 14 questions around the key themes of why children came to Nursery; the role of adults; favourite and worst activities and people.

Use of cameras. Children take photographs of things that are important to them in the setting.

Use of tours. A tour of the setting led by the child, again highlighting the things that are important to the child.

Use of mapping. In discussion with the staff children use their photographs and aspects of the tour to record their views of the setting.

**Assessment requirements in the EYFS**

The Early Years Foundation Stage (DFE, 2012) requires that assessment of children’s abilities and needs is achieved predominantly through observation-based assessment. It states that:

> ongoing assessment is an integral part of the learning and development process. It involves practitioners observing children to understand their level of achievement, interests and learning styles, and then to shape learning experiences for each child reflecting those observations.

(DFE, 2012, p.10)

It is expected that practitioners establish systems to ensure that children are observed regularly and assessments made of this learning are clearly used to support planning and provision. This process is known as formative assessment or assessment for learning.

**Activity 4**

Some challenges and dilemmas have been identified in developing an effective system for observation-based assessment.

- Planning time for practitioners to complete regular observations of children. This is particularly difficult in settings when children attend on an irregular basis.
- Involving parents in contributing to the observation and assessment.
- Creating records that are clear and accessible to everyone who needs to see them.

How could settings overcome these challenges?

1. What have you seen in settings and schools that works?
2. What other ideas do you have?
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Summative assessment, or assessment of learning, is also required within the EYFS in all settings who receive funding for pre-school education from the government. There is a progress check at two years old that all settings must complete, and, if a school has opted to be accountable for progress rather than attainment in children’s learning, there is a baseline assessment that must be completed at the beginning of a child’s Reception year.

The progress check is completed between the ages of 24 and 36 months. Practitioners must review children’s progress in the prime areas and provide parents with a short written summary of their child’s development. The progress check must identify the child’s strengths, and any areas where the child’s progress is less than expected. If there are significant emerging concerns, or an identified special educational needs or disability, practitioners need to plan to support future learning and development, alongside other professionals if needed.

From September 2016 a baseline assessment will be completed at the beginning of Reception year (FS2) in some schools. This is because of changes in schools’ accountability measures. From September 2016 schools will have to choose to be accountable for children’s learning in one of two ways: attainment or progress.

1 Attainment: 85 per cent of pupils must achieve the expected standards in reading, writing and maths at the end of KS2.

2 Progress: A school’s pupils must demonstrate satisfactory progress in reading, writing and maths given their starting point in Reception.

If a school opts to be assessed on progress this will require that each child is assessed as they enter school so that there is a starting point for measuring progress by the end of Key Stage 2. A baseline assessment will therefore be completed at the beginning of a child’s school Reception year. The baseline scores will be used at the end of Key Stage 2 to calculate the progress that a child has made, in comparison with others with the same starting point. The outcomes of the baseline assessment will have to be communicated to parents, within the context of other teacher-based assessments.

Completion and submission of data from the current Early Years Foundation Stage Profile will no longer be statutory. However, settings and schools can continue to use it as a way of monitoring children’s progress internally.

A very small number of parents choose for their child not to do Reception year in school. They remain at home, or in their nursery or playgroup until the end of the Foundation Stage. These children therefore start school at Year 1. How these children will be included in school data if the school has opted to be assessed on progress is not yet clear. It is likely that their progress will have to be measured in a different way as the current baseline assessments are designed for Reception-aged children.

Settings may also be required to complete summative assessments of children’s learning to inform processes of assessment where there is concern about a child or family. This is usually as part of broader assessment of the child’s needs involving other agencies. This could be necessary at any point in a child’s time in a setting or school.
In this chapter we have explored why and how we observe and assess young children's learning. The importance of finding ways to observe, assess and record what children know and can do as starting points to adapt and modify provision and pedagogical practice is emphasised. Different techniques for observing, assessing and recording children's learning have been described and the importance of matching techniques to purpose highlighted. The observation and assessment requirements of the Early Years Foundation Stage are outlined. It is important to be aware that the ways in which we assess very young children's learning is a debated issue. This issue will be discussed in Chapter 10 Thinking, questioning and challenging: a critical approach to the early years.

References


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