Learning through Play Experience Tool

Guidelines for general use of the Learning through Play Experience Tool

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Assumptions about the guidelines

These guidelines have been developed assuming the reader has undertaken training in the Learning through Play (LtP) Experience Tool. It is also assumed that you have legal consent from the guardian of the child/children you intend to record. It is assumed that the consent you have documented is legally binding for the country and region where the filming will take place and also meets European GDPR requirements.

Intention of guidelines

The guidelines will provide an overview of the purpose of the LtP Experience Tool and how to use it to understand a child’s play experience. The guidelines are a practical guide to assist with collecting video data of a play experience. Video data of play experiences are an integral part of the Basic Model for use of the LtP Experience Tool as shown in Figure 1.

Although the LtP Experience Tool has been designed to be used in a variety of settings, the Basic Model for the use of the LtP Experience Tool will remain the same. It starts with the design or set up of a play experience. The play experience is video recorded and this footage is then observed and coded. This coding produces data for discussion. The discussion provides information for goal setting and/or decision-making. These goals and decisions provide the basis for the design or redesign of future play experiences, which can then be observed and coded to provide more data, and the cycle continues.

![Figure 1: Basic model for use of the LtP Experience Tool](image-url)
Purpose of the Learning through Play Experience Tool

The aim of the LtP Experience Tool is to see a play experience through the eyes of a child and use this to understand the texture of the child’s experience. The LtP Experience Tool is not designed to rate or evaluate the child. It is an observational tool used to collect data on a child’s play experience by empathising with a child and how they respond to the play experience.

According to related research in neuroscience, ‘learning in the context of experiences is holistic, meaning that it relates to the development of multiple domains rather than performance on a set of academic measures’ (Liu et al., 2017, p. 3). This essentially describes the difference between surface learning, memorising key facts and principles, and deeper learning, connecting factual knowledge with real-world experiences and really grasping their implications (Liu et al., 2017). Basically, the more contextualised the experience, the deeper the learning that takes place. The LtP Experience Tool advocates for the most meaningful context of all – play.

The quality of a play experience is based on five play characteristics, defined by the LEGO Foundation as Joyful, Actively Engaging, Iterative, Meaningful and Socially Interactive. These characteristics can be very difficult to see in action. The LtP Experience Tool has been developed to help illuminate the subtle nuances of children’s play to foster a better understanding of what quality play looks like. The data collected can then be used to understand and improve play design and facilitation and to determine benchmarks for what quality play experiences look like.

The LtP Experience Tool can be used to:

- promote learning through play
- establish a common language and understanding for talking about learning through play
- inform decisions about play design and facilitation
- describe the texture of a play experience from the child’s perspective
- highlight the benefits of learning through play.

The LtP cannot be used to:

- rate or evaluate a child
- assess a child’s play ability.

How do we understand a play activity?

Taken from Zosh et al., 2017, Learning through play: a review of the evidence (a white paper).

Generally, the literature conceptualises play as existing along a continuum. At one end, free play gives children the freedom to explore, play and discover with minimal constraints. But play is not just something that happens in a vacuum; our environments structure play (e.g. the materials available when playing in a home, yard, urban environments, rural environments, etc.) as do the peers, adults and other people around us. And so, at the other end of the continuum is play that is more guided or structured. The term ‘playful learning’ is an umbrella term that is used to include free play as well as these more structured, guided play contexts (see Figure 2). Additionally, researchers have recently added games under this umbrella (Hassinger-Das, Toub, Zosh, Michnick, Hirsh-Pasek, & Golinkoff, 2017). Playful learning can take many forms, including physical games such as hide and seek, construction play with blocks, board games, pretending with objects, or engaging in fantastical role play (see the literature review on play types and children’s development by Whitebread et al., 2017).
Although there is ongoing debate in research and practice about where free play ends and more guided play begins (e.g. Pyle & Danniels, 2017), our goal in this piece is not to resolve this theoretical debate. Instead, we maintain that learning through play can happen through free play and when adults or aspects of the environment structure the play situation towards a particular learning goal.

**Contextual Data Tools**

The Contextual Data Tools (CDTs) have been designed to collect data about a play activity beyond the child’s observed experience. The suite of CDTs include ‘The Environment’, ‘The Facilitator’ and ‘The Child’. They are used to collect additional information about a play experience for research purposes before, during and after filming. As the name suggests, ‘The Environment’ instrument is used by the data collector to record data on the physical environment or context of a play experience and allows for the documentation of resources available and used. ‘The Facilitator’ tool is used to gather information about the facilitator, such as their background, experience with concepts of learning through play and the intention of the play experience design. At the conclusion of the play experience, the facilitator is invited to complete a questionnaire to document their own reflection. Finally, the facilitator uses ‘The Child’ instrument to record general information about the child’s personality and background. Importantly, this includes information about their temperament and behaviour on the day of filming compared with their typical dispositions. At the conclusion of the play experience, the data collector interviews the child to get a sense of the child’s impressions of the experience. The CDTs provide additional contextual information that help to inform discussions about a child’s experience and how the experience design can be improved in the future.

**What to record when filming**

Before you can plan how you will film your play experience, you need to consider what you will actually be recording.

**Choosing a focus child**

The LtP Experience Tool is designed to be used to observe one child within a play experience. The focus child needs to be decided upon before filming can commence. In most situations, this child should be fitted with a lapel microphone and placed in a position within the play environment that makes their play easily visible to the camera person. Additionally, ensure the focus child’s face is visible by removing hats and tying long hair back. The focus child will need to wear clothing with a waist band or large pocket so that the microphone battery pack can be clipped to clothing or stored in the child’s pocket.
The personality and physical attributes of a child are not a consideration for choosing a focus child. Remember, we are not assessing the child. We are trying to understand the texture of their play experience. As such, it is recommended that a focus child within a group is chosen randomly. This could be done by asking the children to draw straws, guess a given number between one and ten or simply by whomever is wearing the most distinctive clothing on the day. Ensure that you check with the child that they are happy to be the focus child. If not, randomly choose someone else.

Relevant details about the focus child should be recorded in The Child CDT.

**Interactions**

Part of capturing a child’s whole play experience is recording their interactions with others. Who the child interacts with in a play experience will depend upon the play experience design and also the play environment. Within a home context it is very easy to identify who the child might interact with; however, in a school environment this can be a little more challenging.

The key consideration for ensuring you capture a child’s interactions with others is the audio recording. As discussed in the *Guide to filming a play experience* section, it is recommended to have a lapel microphone on the focus child and ask adults to speak in a clear voice. If the focus child speaks to someone, it is likely that their lapel microphone will capture enough of what is being said to make the interaction code-able.

**Introduction to play experience**

If a facilitator intends to introduce the play activity, it is important that this is filmed as part of the play experience. Although the first two minutes of an experience are not coded, it provides important contextual information to the observer about the intention of the experience and is vital for informing coding of the Iterative and Meaningful characteristics.

**Recording length**

It is recommended that you record an entire play experience. The length of an experience will depend on your play design. Within a home setting this may only be 15 minutes and in a school setting it might be 50 minutes, including an introduction and reflection at the end. There are no real limits in terms of how long you can record. You may plan to record an hour-long experience and find the child has had enough after 20 minutes. It is suggested that you plan to record the maximum length of your play experience design. You will then have the flexibility to turn off the recording if the experience is shorter than expected. The recommended coding time is 25 minutes – this will be discussed in detail in the next section.

**Coding**

This section is a brief overview of the process, so that you can understand the intended use of the video data that is being collected and coded.

Remember, coding is not about assessing the child’s ability to play. A coder’s role is to empathise with the focus child’s experience. A coder evaluates the focus child’s behaviours in order to understand what the play experience was like for the child. Using evidence in the video, they make judgements about the focus child’s experience.

A coder will identify and code the child’s peak behaviour for each time segment. This is the highest State of Play that the child reaches in the coded segment, no matter how fleeting. These codes form the data which describes the texture of the child’s play experience.
Personal biases
Before you begin to code a video, take a moment to reflect on what you know about the recording already. Do you know the facilitator? Do you know the children? What do you think of them? Do you know the space the experience was recorded in? Even if you do not know anything about the video to be coded, it is worth taking some time to reflect on your expectations. Acknowledge any biases, positive or negative, you might hold and try to be aware of them as you are coding. Examples of bias might be that a child with unkempt hair is unlikely to pay attention; a lack of windows in a room makes for a poor play environment; or expensive or elaborate play equipment probably means the experience was high quality. When we stop to reflect on these, we know them to be untrue, but these ideas, these biases, can colour the way you observe a play experience. You may need to stop during the coding process and take a moment to reflect and then self-correct. With practice, you will become more aware of your biases and be able to self-regulate more intrinsically. In the meantime, do your best to code what you see in each moment of the recording using only the facts within the video.

Coding segments
The first two minutes of a play experience is an observation only period. The coder will use this time to orient themselves to the play experience, identify the focus child and try to understand the experience intention. After this initial observation period, coding will be undertaken in two-minute segments. This means that codes will be assigned to the characteristics for every two minutes of the play experience video after the initial two minutes of observation.

An effective way of gathering evidence and assigning codes is to transcribe the key events for each segment while watching the recording. It is important to complete one segment before moving onto the next. Viewing ahead introduces bias into coding and should be avoided. You may need to pause the video frequently so that you can accurately note what you are seeing and determine the time it occurs. It is important to record the time novel events occur. If a child continues the same behaviour from one segment to the next, it is not necessary to note the evidence in the second segment as there is nothing new to record.

You can use a written transcription to assist with systematically analysing the child’s experience and assigning codes for each characteristic. Remember that the LtP Experience Tool does not describe a continuum; the child will fluctuate within the levels and characteristics as they progress through the play experience.

Figure 3 example of a coder’s written transcription of a coding segment
Before moving on from one segment to the next two-minute segment you should put all of the relevant information into the coding sheet.

This a blank template of the coding sheet.

<table>
<thead>
<tr>
<th>Video title:</th>
<th>Focus child:</th>
<th>Coder:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0–2 min</td>
<td>2–4 mins</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Observation only</th>
<th>Code</th>
<th>Evidence</th>
<th>Instrument does not measure (comment)</th>
<th>Additional comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joyful</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actively engaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iterative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaningful</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socially interactive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This is what the example transcription would look like in the coding sheet.

<table>
<thead>
<tr>
<th>Video title:</th>
<th>Sensory</th>
<th>Focus child:</th>
<th>Ryan</th>
<th>Coder: Lisa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2–4 mins</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Evidence</th>
<th>Instrument does not measure (comment)</th>
<th>Additional comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joyful</td>
<td>Own</td>
<td>enjoying the process of building his tower even when not working</td>
<td></td>
</tr>
<tr>
<td>Actively engaging</td>
<td>Own</td>
<td>immediately focused on a plan</td>
<td></td>
</tr>
<tr>
<td>Iterative</td>
<td>Recognise</td>
<td>3:30 Pulls everything off tower and turns platform upside-down</td>
<td></td>
</tr>
<tr>
<td>Meaningful</td>
<td>Own</td>
<td>goal directed, verbalises plans</td>
<td></td>
</tr>
<tr>
<td>Socially interactive</td>
<td>Own</td>
<td>2:42 &quot;Can we join forces?&quot;</td>
<td></td>
</tr>
</tbody>
</table>
Guide for preparing to film a play experience

You do not need to be a videographer or expert director to capture a play experience that is fit for coding using the LtP Experience Tool. The goal of filming a play experience is to capture the focus child’s facial expressions, body language and audio as well as what they are playing with. This part of the guidelines will walk you through some important considerations for successfully filming a play experience.

If you already have video footage, you can use this guide to determine if the video is of a suitable quality for coding. Firstly, determine if the footage follows the play of one focus child through the whole experience then use the following information to determine if the audio and visual quality is reliable enough for coding.

Equipment

Adequate video capture can be achieved using basic equipment as shown in Figure 4.

![Equipment Images]

Figure 4: Basic equipment necessary to film a play experience

Play design

When planning to film a play activity it is recommended that you consider the play design. This includes anticipating how the focus child will move through the experience. Set up the environment so that it invites the child to move through the space in a way that is easy for the camera to capture. The images in Figure 5 provide three general examples of common problems to take into account across all play experience designs.
Additionally, considerations such as the amount of movement you would expect, the types of materials the child will be using and the number of children/people participating in the play experience all impact the setup of the recording equipment.

When considering the design and capture of a play experience, you should plan for the camera person to be as invisible to the child as possible. You don’t need to dress in camouflage and face paint but you should prepare the child for the camera person’s role in the experience. Talking to the children in the group, and the focus child in particular, about what you are doing is important for setting the tone of the camera person’s involvement. You might say something like, ‘Play is so interesting to me. I want to learn more about what makes play joyful for kids. Is it okay if I record you while you are playing? I won’t get in your way, you can pretend that I’m not even here.’ What is important about this explanation is that you are explaining why you are filming, asking for the child’s permission and providing information about how the child should respond to the camera person’s involvement.

Most play experiences fall into one of the following three categories: small, moderate or high movement play. You can use these to help you decide what your recording requirements are. In all types of play, facial expressions are an important piece of evidence about the child’s experience, so pay attention to where the camera focus is set. If the camera is focused on a stationary object (like a table) and the child moves around while playing, their facial expressions may be unfocused and difficult to interpret. Understanding the intention of the play experience, and what resources might be involved, will help you to anticipate the scale of the movement likely to be evident in the play experience.

Figure 5: Examples of common problems
Small movement play experiences include drawing, painting, LEGO, card or board games, and small crafts. Essentially, the types of play where a child will happily sit or stand at a table, with the child likely to be in a forward-facing position throughout. In this type of situation, one camera attached to a tripod or set somewhere stable should be sufficient to capture the experience. An important consideration for this type of play is being able to see what the child is doing, as well as their face. Examples of this are shown in Figure 6. You might need to consider having the camera on a slight downward angle to capture drawings. Having the camera close enough to distinguish details in small crafts might also be helpful. Because the camera will be close to the play, you should be able to capture the audio sufficiently without microphones; provided there is minimal background noise. If the small play is taking place in a room with other people, a lapel microphone is recommended.

With a camera positioned on the side, as in Figure 7, the children's facial expressions are only partially visible. It is more effective to position the camera directly in front, or on an angle, for small movement play to capture facial expressions of the focus child and interactions between participants. Figure 8 demonstrates two examples of where the camera can be placed effectively in relation to the play area.
Moderate movement play

Moderate movement play includes building with blocks, marbles, car racing, small climbing structures, larger LEGO and larger craft projects. In these types of play experiences, children may move around a table or work area. Ensure you make considerations for capturing activity that moves from a table to the floor (and vice versa), across a space and for children to move around the materials. For these types of experiences it is recommended you use a handheld camera, attached to a selfie stick, and a lapel microphone. It is important to consider how the child will move around the experience. In this type of play, the child is unlikely to stay in a forward-facing position, so you need to be ready to capture all angles of their play. The focus child is also likely to engage in detailed work as well as larger movements, so it is recommended that the camera person is free to follow the focus child around. You will need to
consider how the camera person will move around the space and ensure that there is a clear path free of tripping hazards.

The image in Figure 10 highlights the difficulty with filming moderate movement play. In this frame, from a dominoes experience, the boy on the far left was the focus child. The boys started the play facing the camera but gradually moved around the table and onto the floor as their play progressed. From this angle, the focus child’s face and play are blocked from the view of the camera by his playmate.

Using an agile camera set up for moderate movement experiences allows the camera person to move with the focus child. It is important to consider how the children might move around the space in advance, so that the camera person can be prepared and minimise their interference in the play experience. Although it’s okay for the child to have their back to the camera for a few seconds here and there, the aim is to capture the child’s face and what they are playing with for as much of their experience as possible.

The imaginative play experience, shown in Figure 11, is a useful example to consider how you might capture a child’s experience when she moves into a tent. Can the camera be moved to record through the window at the side of the tent? What if she turns to the other direction? Could a selfie stick be used to capture the play when she turns to the other side?

Figure 12 shows how an optimal play area can be defined to assist agile filming for a moderate movement play experience.
High movement play

High movement play includes role play, dance, larger climbing, ball games, and rough and tumble play. These experience designs are the most challenging to film, as they require a lot of movement and use of space. It is recommended that a camera person uses a camera attached to a selfie stick and has the freedom to follow the focus child around. It is important to find the right balance between being close enough to capture facial expressions and far enough away to be able to swiftly move with the play, which will take some practice. The camera person should practice standing back from the experience and using the zoom function to assist with following the sequence of play. It is essential to use lapel microphones for high movement play, as it is not possible to consistently stand close enough to capture adequate audio.

Having a consistent and steady image is important for capturing a play experience that is viewable. A tolerance for how long a child can have their back turned to the camera should be built into the recording expectations for high movement play. As coding uses two-minute segments, a tolerance of around ten seconds is recommended. These practical limits are important as it will not be possible to capture the child in a forward facing position at all times. There should also be an assigned play area that the focus child should be asked to play within that is generous enough to allow the child to play authentically but not so big that filming is impossible.
As an example, Figure 14 shows a child playing with a balloon. In an experience like this, the child is likely to change direction quickly and often. The camera person needs to be able to move freely to capture the unpredictable movement of the play. It is important to consider in advance how long a child can have their back turned to the camera before the camera person relocates.

Figure 15 shows how an optimal play area can be defined to assist agile filming for a high movement play experience.

**Play space**

For all types of experiences, it is recommended that you do not rely on natural light. Even on a clear day, natural light can be blocked unexpectedly by clouds, trees, buildings or even passing traffic. This can drastically affect the clarity of your recording. Therefore, where possible, film indoors with window coverings closed and internal lights on. If you do not have window coverings, aim the camera away from windows as the brightness from the windows might darken the participants. If your experience needs to take place outdoors, do your best to choose a location or filming direction that will be least impacted by changes in natural light. In general, cloudy days offer more consistent light than sunny days.

When choosing a space for the play experience, ensure that it is sufficient to contain the play within the camera view. It is important that all the materials and equipment needed are within the limits of the play.
area and that the view of what the child is doing is unobstructed. You need to record everything the child is doing. To ensure a clear view of the child as the play progresses, you should keep an eye on what the focus child is doing and move things out of the way if they obstruct the camera’s view. Figure 16 provides an example of a clear and obstructed view of a play experience.

![Clear and obstructed views of the play experience](image)

**Figure 16: Clear and obstructed views of the play experience**

If there is equipment (e.g. paint, markers or manipulatives) used as part of the play experience, consider how visible it needs to be on the video. Is it important to be able to read the faces of cards, for example? If someone is writing on the board or on a drawing, can the writing be read on the video? Consider the level of contrast if this is important. Place light-coloured equipment on a darker background where possible, or use new, dark markers on whiteboards.

Refer to The Environment CDT for ways to document information about the context and resources used in a play experience.

**Recording a play experience**

Planning to film a play experience is just as important as planning the experience itself. Use the following checklist to assist with planning your play experience, and filming, to ensure you are well prepared.

1. Obtain legal consent for children to participate.
2. Decide on your play experience design (e.g. small movement, moderate movement or high movement).
4. Choose an area that is sufficient to contain the experience for ease of filming.
5. Consider lighting and mark the play space with tape.
6. Do a practice run.
7. Have all materials within the limits of the play area and ensure a path around the play area has been cleared, so the camera person can follow the focus child’s play safely.
8. Fully charge all of your equipment.
9. Ensure your devices have enough storage space to complete the recording.
References


