SPOTLIGHT ON

Photostory¹

Photographs, and the stories that they describe, provide a way to engage with the community in describing, measuring, and exploring changes in the learning environment.

The Photostory technique provides an engaging and robust methodology through which to:
- strengthen awareness and understanding of ECD
- adapt interventions to meet specific and relevant needs
- generate an evidenced based dialogue on progress and change.

I. What are the key components?

a. **The Story:** Current ECD practices in the community and in homes are captured in a single, or a linked series, of photographs. The photographs are accompanied by a written narrative that describes the location of the activity, the proximity of the caregiver, and any other information that clarifies the learning environment described in the photostory.

b. **The Story Matrix:** The quality of the activity portrayed in each photostory places it in a rating matrix/map. The overall pattern generated by evaluating multiple photostories illustrates the strengths and weaknesses of the current learning environment. Change and progress can be tracked by comparing matrices over time. The matrix below illustrates the placement of 72 separate photostories collected at the beginning of an ECD intervention. The matrix and its interpretation are described in section IV.

Example of a Photostory Matrix - Early in the Intervention

A	B	C	D	E
	37 **(1)**	10 **(1)**		
	45, 47 **(2)**	52, 63 **(2)**		
8, 16, 32, 57, 66 **(5)**	9, 19.2, 21, 22, 23, 24.1, 25, 30.2, 33, 42.1, 42.2, 49, 58,59, 61, 67, 68, 69 **(17)**	1, 3, 4.1, 5, 11, 12, 20, 27, 28, 29, 31.1, 34, 35, 36, 38, 41, 43, 44, 46, 50, 51, 56, 64, 71, 72 **(25)**		
13, 15, 7, 14, 26, 53, 60, 65, 70 **(9)**	2.1, 2.2, 4.2, 17, 19.1,30.1, 40, 62, 55 **(9)**			
18, 31.2, 39, 48, 54 **(5)**	6, 24.2 **(2)**			

c. **Creating a Repository of Contextualized Resources:** The material collected provides evidence of multiple aspects of early child development, including food and nutrition; shelter and care, health and safety, play and learning. Each photo, each story, provides a contextualised resource to initiate discussion on ECD. This material trigger reflections and stimulate conscious planning and decision making.

II. Why we chose to develop and use Photostory

The Stepping Stones programme promotes positive and conscious activity by caregivers to support their children become confident and independent learners. The hypothesis is that greater awareness of current activities and practices will ensure that support is matched to children's learning needs. As part of the program we sought to include the community in the monitoring, tracking and planning of positive learning opportunities.

In early childhood, every experience provides the opportunity to learn. Photostory helps capture and illustrate those experiences, and explore how they are structured. The "learning space" is described using a framework provided by the learning theory of **Vygotsky**, and the concept of the **Zone of Proximal Development (ZPD)**. The ZPD is where learning occurs, stimulated by adequate support, called Scaffolding. The definition of "Adequate" is dynamic, linked to how much, or how little, scaffolding is required for an individual child to be engaged and learn.

Our application of the concept of the ZPD acknowledges that effective learning:

a) Is built around the provision of appropriate opportunities and appropriate encouragement.
b) can be constrained by "too much" or "too little" support/ scaffolding.

III. What were the key question(s) PhotoStory was used to answer?

- What can we learn about the current experiences of children, the informal learning space, and the role of parents in that space?
- How do these experiences change/shift over time?

IV. How do you extract evidence of the "learning" environment?

In common with other uses of photo evidence Photostory was designed to include the community as an active participant in the conversation. In addition it provides a structured method to monitor and evaluate the quality of the experiences described, through a rating of the level and direction of the behaviour captured.

Two key dimensions of Early Child Development (ECD), are used to place the story in a matrix or map: Emotional Engagement & Organization/Structure. The story matrix is divided on a 5 x 5 grid, A to E, ranging from "too little" on one side to "too much" on the other. The central space, C, is conceived as the effective learning space.

Each story can be examined from two perspectives, the child's and the caregiver's. From the child's (the learner's) perspective the rating matrix examines a) the engagement of the child in that activity, and b) the level of stimulation provided. The focus is therefore on the match between the level of difficulty faced and the learner's emotional engagement in the activity. When a caregiver is present in the photostory their contribution is evaluated through a separate matrix. This records the pattern of a) emotional support provided they provide, and b) the way in which the caregiver has organised or structured the task to stimulate achievement.

While there is clearly some overlap between the two matrices, or maps, as they both consider how the task is structured or organised, the child's perspective more closely describes how well matched the activity is to the child's needs, while the second better describes caregiver's practices, providing a measure of conscious or positive parenting.

An observation/rating guide that describes these ratings, guiding what to look for in each photostory, was developed and is shared at the end of this document.

In section 1 we provided an example of a story matrix completed early in an intervention. Here below we reproduce a matrix completed later in the same intervention[2]. By comparing the pattern between the two matrices we learn of a shift towards the central, more positive space, with a closer matching of task difficulty to the children's learning needs.

This graphical representation, when the surrounding legend is removed, is a simple way of sharing the data. It illustrates that the majority of activities captured provide positive learning

[2] Reproduced from:
Gaidhane A, et al (2020)

opportunities. The dots spreading to the left suggest that some more attention could be paid to providing activities that children would find more engaging. By then pulling up examples from the space CxC, and examples of the outliers, discussion can be held to plan out new learning opportunities.

Example of a Photostory Matrix - Post-Intervention[2]

Figure 2b: Matrix of The Learning Space (Child Perspective) Later
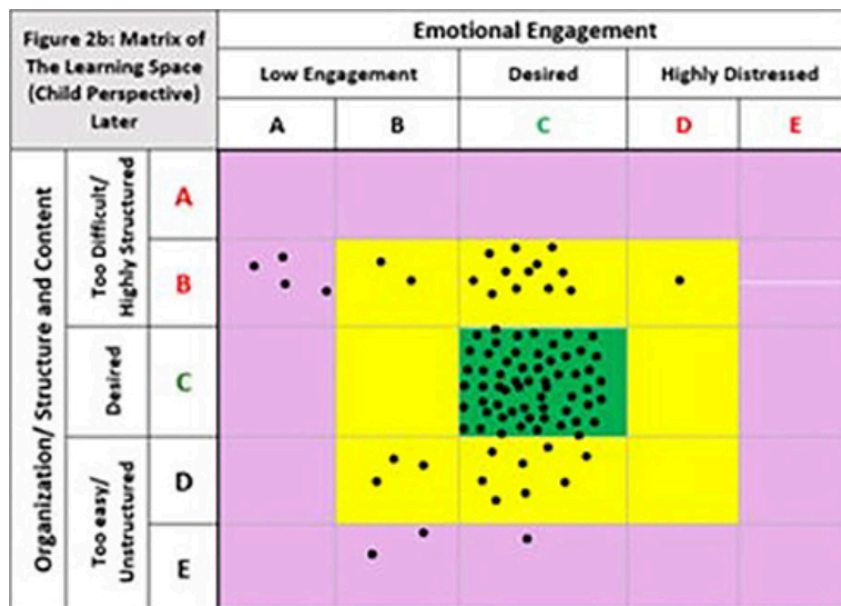
V. What are the key elements of the technique and its application ? Lessons learned

The Photostory process summarised in the figure below, was developed through an extended period of trial and error. A method was built that could be feasibly and consistently administered over time. The detail of this development can be found in the paper referenced in the footnotes on page 1.

As each component of the method is applied challenges faced should be intentionally identified and resolved. We drew on the experience of the team, calling on the cultural, technical and scientific knowledge of those participating to select a solution that not only overcame the challenge faced, but also built skills and expertise collaboratively.

The Application Process[2]
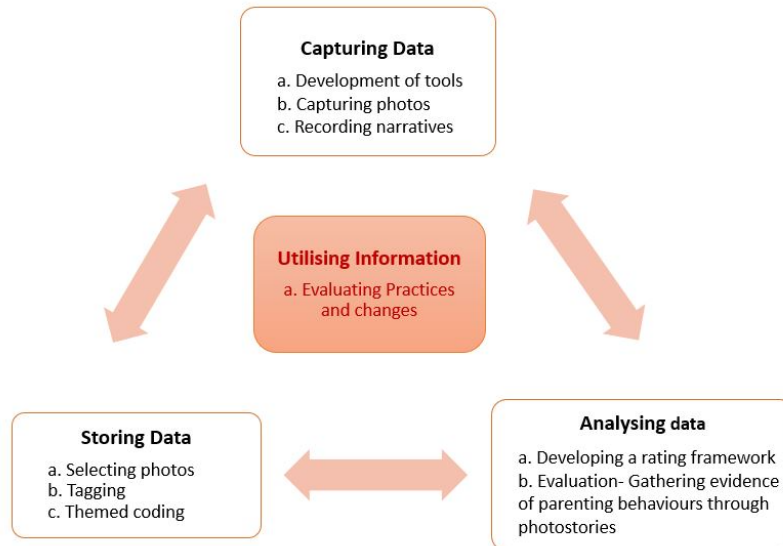
Capturing data: Collecting photographs that can be "read" is a skill that is best developed under guidance. It is helpful to start this process by providing the "photographic" team some examples of good composition, distancing etc. It is also helpful to enable them to see immediately the results of their efforts, and the effect of adjustments they make. This experience swiftly and significantly increases the number of photographs that provide clear stories.

Ethical considerations must be addressed early on. In setting up the process issues of safety, of respectful representation of participants, both in the photos and in the narratives must be clarified. How images are used, and shared are also important to consider and stipulate.

Storing Data: We also learnt that it is essential to create, and systematically apply a tagging and archiving process. This process needs to be tightly co-ordinated, and is thus best managed by a dedicated person. The photos, and the associated narratives, need to be processed in real time. Each photo, or series, requires a unique number, linked to the date, place, and time of day of capture. Photos should also be linked to the narrative through an associated number and story title. To avoid errors it is best to log this information on the day the story is captured.

Analysing Data: The ratings used for analysis were defined and refined through consensus, first in groups, then in pairs. In this way consistency, and thus reliability, was achieved, reaching a level of agreement of over 90% between individuals.

The process of group discussion to reach consensus is a valuable technique to use in community discussion groups. Awareness and decision making is built through the exploration and reflection on the shared meaning of each photostory.

VI. Evaluation of Photostory[3].

The main strength of the process was the demonstration of its adaptability to the local context and of the ease with which participants can be directly involved in the evolution and application of the method. This method is both *inclusive* and *dynamic*.

We were also able to develop a systematic rating scale, which links parent and child behavior to discussion on promoting positive parenting practices. The rating framework can be applied rigorously and was *informative*. It identified variability within the population and recorded change at both the individual and community level, and was thus also *people-centred*.

We demonstrated within our programme that the Photostory technique built awareness of current practices, and understanding of learning needs. It was observed to contribute to team training and to community engagement. It therefore also demonstrated *interaction*.

VII. What do we still need to consider?

We feel that we are only beginning to exploit the technique as a means of programme evaluation. In future steps we intend to bring families more directly into data capture, to explore the ability of this technique to both measure and enhance the shift from awareness to practice within the home.

In addition, the framework itself needs to be validated through the exploration of the relationship between the concepts captured and child development outcomes.

We also need to explore: the number of photostories required to provide an adequate sample, and the potential influence of bias on the selection of stories that are captured or shared.

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[3] In this evaluation we consider the 5 aspirations of Measurement for Change, that of building the capacity to be Dynamic, Inclusive, Informative, People-centred & demonstrating Interaction.

Rating Guidelines

CHILD ENGAGEMENT	STRUCTURE & CONTENT
A = No engagement. The _child appears bored or withdrawn_. There is no eye focus, no emotions on face and no evidence that the child is participating in the activity. **B = Partial engagement.** The child maybe sitting close by an activity, but _is passive with inconsistent participation._ **C = Full and active engagement.** The _child is actively participating in the task,_ expressing keen interest and focus in the activity. **D = Child's participation is partially interrupted.** There are signs that _participation is being disrupted_ by discomfort or irritation or anxiety. **E = Child's participation is completely disrupted.** The child's agitation is evident, through crying or _signs of extreme irritation, leading to the child withdrawing from the activity._	**A= Unable to attempt the task.** Task limits growth since it is very challenging. _The task is too difficult for the child to complete or places the child in danger._ **B=Learner can only partially tackle the task.** The child is struggling to complete the task since it is _too difficult for the child's level of development or placing the child in some potential danger._ **C=Task well matched.** _The child is able to fully participate_, even complete the task, without exposure to serious danger. **D= Task simplicity somewhat limits growth** The task is relatively easy limiting the child to explore their potential. _The child could do more if allowed._ **E= Task is too simple.** The child is given something so simple to do that it _severely limits their scope to explore and develop_ their skills or independence.
PARENT ENGAGEMENT	SCAFFOLDING
A=No engagement. The _parent appears disinterested or withdrawn._ e.g. the parent is not taking part, looking away, sitting away, focusing on something else. **B=Partial Engagement.** The _parent is distracted by another task._ The parent maybe sitting close, but only shows inconsistent interest in the child activities. **C= Full or Adequate engagement.** The parent is sitting close by, and shows _consistent and positive interest_ in the child activities. **D= Engagement influenced by irritation or anxiety.** The parent is engaged but the _quality of the engagement shows worry, anxiety and/or irritation with what the child is doing_. **E= Parental agitation is evident.** The parent is excessively engaged such that their anxiety, anger, worry _interferes with the activity_.	**A=Parent dominates the activity.** The parent provides too much support. Their intervention _severely restricts opportunities for a child to engage directly in the task_, or explore their strengths or weaknesses. **B=Parent's behaviour interrupts the activity.** _The task is as per the convenience or pace of the parent_ rather than the child's needs or interests. **C=Parent organizes the situation to maximize the child's independence** without exposing the child to unnecessary hazard. The parent balances their participation with the child, _enabling the child to fully participate_ and complete the task, at his/her pace, without exposure to any serious hazard. **D=Parent provides inadequate, limited, support.** The child is struggling to complete the task, but the _support provided is inconsistent or inadequate_. **E=Parent leaves child without support.** The _parent neglects to provide any necessary support_ to the child, which leaves the child unable to continue the task or put the child in danger.

What does ENGAGEMENT look like:
The evidence for engagement how "involved" the child/parent is in the task:
Do they look like they want to participate in the activity?
Look at: eye focus, emotions on the face, body language, child's/parents position in relation to the activity, for clues.
Look for signs that the parent is interested in what the child is doing, is providing praise or encouragement.

What does Appropriate Structure and Content look like:
The evidence for task level appropriateness/independence is how the child is able to take part, and what they are able to achieve, answering the question "Is the task at the appropriate level for a child to show their skills and independence?"
Look at: what the child is doing, at the materials in comparison to the child's size, and, if possible, the outcome of the activity. Is the child being placed in harm or danger?
You look for evidence that the task is not too easy or too difficult for the child to actively participate, also taking into account their health and safety. Or the task may appear simple and overly repetitive.

What does Appropriate Scaffolding look like:
 Look for signs that the parent is considering the amount of support that the child needs to succeed. In the language of teaching and learning we call this "Scaffolding". Scaffolding is the provision of the appropriate assistance that will give the child enough of a boost to achieve the task. We are interested in the child participating and not just succeeding.