

Monarch Butterfly Adventure

A child brought along a dead monarch butterfly from home to the kindergarten one morning to show Dawn and Helen. The monarch caught the attention of a number of other children, leading to a lot of questioning from the children and discussion about the dead butterfly. "What is it?" "Where did it come from?" "Why did it die?" The conversations between the children and the teachers continued and led to some of the children and teachers discussing together the life cycle of a butterfly. They searched out a book from the science box that illustrated and described this life cycle. As they discussed the pictures and read the words, some of the children obviously made a connection between what they saw in the book and what was familiar from home because it wasn't long before several children announced that they had monarch caterpillars at home on swan plants.

More talking followed between the teachers and the children, and the children decided they wanted to find out more about monarch butterflies. More books were found at the kindergarten showing other types of butterflies and moths. Together with a teacher, the children compared the size, colour, and features of the different species. They also revisited a favourite storybook, *Maisey the Monarch* by Sue Galbraith.

Though the children were interested in the other butterflies and moths, Dawn and Helen realised that it was the monarch in particular that really captured their interest. So they decided to follow through on the interest of the children – monarch butterflies.

Helen and Dawn organised a small group brainstorm with the interested children, based around what the children thought they would like to do to help them learn more about monarch butterflies. Because the children's brainstorm related mainly to the life cycle of the monarch, Dawn and Helen decided to focus on this first. They drew up a plan from the ideas generated and set about resourcing the kindergarten environment.

Helen visited a friend who had a lot of swan plants at her house. She gathered some of the chrysalises and brought these to the kindergarten for the children.

A child offered to bring in a caterpillar from home and, after this was suggested, several of the children decided to bring in their caterpillars from home too. The caterpillars started arriving the very next day. Some children brought eggs on leaves and on the pods of swan plants.



A special area was set up to house the swan plants, eggs, and chrysalises. One feature of the kindergarten environment is a huge branch from a tree (with plastic leaves attached) that looks like a small tree growing inside the kindergarten. This "tree" became the centre of the area, and many chrysalises and eggs were housed on it. The children were really interested in the way the caterpillars twisted their bodies in an effort to construct their chrysalises. Sometimes, the caterpillars crawled onto the tree from the swan plants to build their chrysalises. In fact, soon chrysalises could be found all over the kindergarten.

Dawn comments: "The children were going home and talking about the butterflies. This prompted interest from their siblings, and there were two children in particular who would come along after school to check on the progress. They spotted some of the butterflies up on the high window sills and were worried about whether they would be able to find their way outside, so they offered to help. So out came the stepladder, and up they went."

After a few days, the children found out how hungry the caterpillars were. They soon realised that we didn't have enough food for them to eat, so they had to find out what else they ate. The children were worried the caterpillars would die without food. They theorised about the types of things caterpillars would like to eat. One or two of them were very knowledgeable about what was considered good caterpillar food, informing the group that pumpkin was a good alternative to swan plants. The teachers and children looked this idea up in one of their books and, sure enough, pumpkin was recommended. The children brought pumpkin from home, but soon noticed that the pumpkin wasn't really being eaten by the caterpillars. After a rethink, the children decided more swan plants were needed.

The children's artwork was dominated by their interest in the butterflies.



Georgia brought in her own chrysalis from home on a lettuce leaf. We hung it in the tree. Some children noticed that the chrysalis was moving. We went and called in as many children as we could to come and look. We were lucky enough to witness the hatching process. This took a long, long time, but the children stayed engaged. We noticed that the

butterfly came out head first and then turned around and quickly grabbed the leaf with its legs to hold on. We had to wait for its wings to dry. We watched it spread its wings out and exercise them. We were surprised to find out that, just like in the birth of a baby, the butterfly had an "afterbirth". This led to all sorts of discussion about whether it was a boy butterfly or a girl butterfly.

Over the following days and weeks, the butterflies continued to emerge from their chrysalises in a steady stream. The children were able to watch this transformation many times over.

Miles: I saw ...

Nick: I can see some more.

Miles: There's one.

Nick: There's one.

Miles: Here ... here's one. A chrysalis.

Nick: Miles, you're a good finder.

Miles: I've got binoculars. Let's look for babies. I saw one with kind of sparkly things on it. Hey, look! When I saw that one, it was wriggling around.

Nick: Hey, look! Don't touch it.



A significant feature of this project was the way the children learned to care for the caterpillars and butterflies. They showed incredible care for the protection of these tiny living things as they grew and changed. The teachers took special care in helping the children to find out how to care for the caterpillars and butterflies.

As each butterfly got out of the chrysalis and had dried and rested, we talked to the children about how they had to be released into the natural environment. The children would carry the butterflies out on their fingers to the playground to release them. Sam tried to carry a butterfly outside, but the butterfly wouldn't fly away, so he carried the butterfly on his finger throughout the rest of the session, including mat time.

When Nana arrived to pick him up, the butterfly was still on his finger, refusing to move! So he got into the car and drove all the way home, where Sam released it in his own garden.

Toy monarch butterflies were bought for the children to play with to help fulfil part of their initial desire to play with the monarchs.

Some of the children chose to make butterflies, caterpillars, and so on out of baker's clay, and they hung these in the tree with the real caterpillars, chrysalises, and butterflies.



Helen visited the library to get some books for the project, but these were all out due to the butterfly season. Not to be put off, though, the children had the idea of making a book together about the life cycle of the monarch butterfly for the kindergarten.

By the end of the term, fifty-two butterflies had been raised and released by the children.

Reflecting on the project, Helen says: "We, as teachers, have learned through this project how important it is to record every step of the learning process, not just the products, as this tells us about the depth of learning that goes on. One of the other most significant things to us was the number of children involved here. There was a real sense of belonging evident. All of us learned together, teachers included. There were several times when Dawn and I said: 'I don't know. How could we find out?'"

Dawn adds: "Of course, the interest is still there, months on. If the children spy a butterfly flying over the neighbour's fence, it always leads to questions and discussion. 'Is it one of ours?' 'Where is it going to?' 'Where has it come from?'"



What's happening here?

A child brings a monarch butterfly to kindergarten, inspiring a project that involves the whole kindergarten community. This project includes brainstorming ideas, using books as references and for additional interest, exploring the life cycle by observing eggs and chrysalises, doing artwork, making a book, and having discussions.

What aspects of holistic development does this assessment exemplify?

This exemplar illustrates the children's development of working theories as they listen to each other's ideas, try them out, and then perhaps reject them. For example, they work out what to feed the caterpillars and they watch the hatching of a butterfly and wonder whether it is a boy or a girl.

Two teachers, Dawn and Helen, contribute to this record, each adding their own perspective to the analysis.

Dawn comments: "A significant feature of this project was the way the children learned to care for the caterpillars and butterflies." She tells a story about Sam, whose butterfly wouldn't fly away when he carried it outside, so he carried it all the way home and released it in his own garden. She also writes about how older siblings became interested and how two in particular came along after school to check on progress. "They spotted some of the butterflies up on the high window sills and were worried about whether they would be able to find their way outside, so they offered to help. So out came the stepladder, and up they went."

In her reflection at the end, Helen comments: "There was a real sense of belonging evident. All of us learned together, teachers included. There were several times when Dawn and I said, 'I don't know. How could we find out?'"

How might this documented assessment contribute to holistic development?

This documentation describes a project that started with one child's interest and in which many others became involved.

The documentation includes the children's ideas and the details of the group story over some time. It is made accessible through wall displays and a book developed by the children and the teachers. Its accessibility means that it can be revisited. The book can be a resource for another butterfly project with another cohort of children.

What might this tell us about informal noticing, recognising, and responding in this place?

The teachers followed through on the children's interest when they:

- conducted a brainstorm with a small group of interested children, asking them what they would like to do to help them learn more about monarch butterflies;
- drew up a plan from the ideas generated;
- set about getting the resources (for example, collecting swan plants and chrysalises, visiting the library, and making their own book with the children when all the relevant books were out);
- devised ways in which the children could play with monarch butterflies without endangering them;
- encouraged artwork to represent the learning.

The teachers valued the process of learning and saw learning as a collaborative process between teachers and children (for example, "All of us learned together, teachers included").