Aligning curriculum, pedagogy and assessment An example of practice in Prep Blended event-based and project approach – A surprise party for Walter

Australian Curriculum - Mathematics

Sequencing teaching and learning How do I teach it?

Achieving range and balance*



Approach

• Blended event-based and project approach

Practices

- Stimulate young learners' interests and experiences
- Orientate young learners towards the staging of an event
- Orientate towards a shared outcome or the creation of a product

Strategies

- Scaffold young learners' designs and plans
- Model context-specific language
- Provide resources to support project

Characteristics of age-appropriate pedagogies*

- Active
- Agentic
- Collaborative
- Creative
- Explicit
- Language rich and dialogic
- Learner focused
- Narrative
- PlayfulResponsive
- Kespolisive
- Scaffolded

*See over for an explanation of approaches, practices and strategies, and the characteristics of age-appropriate pedagogies evident in this Example of practice.

Our students

Working together to ensure that every day, in every classroom, every student is learning and achieving

This is an example of how one teacher incorporated a **blended event-based** and project approach. The broader event-based learning focused on the <u>Australian Curriculum</u> Humanities and Social Sciences learning area. The smaller project within the event-based learning related specifically to an aspect of the <u>Australian Curriculum</u> Mathematics learning area.

Setting the scene

The teacher used Walter, a persona puppet, as a pedagogical resource to create a narrative flow in the classroom and as a springboard into curriculum throughout the year. Initially, Walter was used by the teacher to support the development of personal and social capability as the young learners learnt to understand themselves and others, and to manage their relationships, lives, work and learning more effectively.

By Term 4, Walter had become an integral part of the classroom. The teacher used Walter's hurt feelings – thinking that everyone had forgotten his birthday – as a springboard for teaching and learning. The broader event-based learning drew on the young learners' own experiences, and it was decided to plan a surprise party for Walter. The teacher encouraged the young learners to plan and enact the event, connecting socially and culturally significant knowledge from their homes and community. The surprise party for Walter provided the teacher with opportunities to revisit an aspect of the Australian Curriculum Humanities and Social Sciences learning area that had been covered earlier in the year (ACHASSK012).

Mathematics

Although the overarching context was an adult-initiated and planned event, a spontaneous project emerged. During a shared planning session, the young learners decided that everyone would need to wear a party hat to the surprise party for Walter. The teacher drew on this idea as an opportunity to revisit an aspect of the Australian Curriculum Mathematics learning area that had been covered earlier in the year (ACMMG009).

During this language rich and dialogic group work, and as the young learners decorated their party hats, the teacher and teacher aide scaffolded conversations that allowed the young learners to: distinguish between lines and two-dimensional shapes; name, describe and sort two-dimensional shapes; identify two-dimensional shapes in the environment; and compare and sort familiar objects based on shape features. The teacher and teacher aide modelled context-specific language, for example, square, rectangle, circle, triangle, sides, corners, straight and curved, while the young learners were decorating their party hats.

The teacher and teacher aide worked with the young learners in small groups during indoor learning. Decorating party hats was one of several available learning experiences. Each young learner was provided with a plain party hat, neutral response sheet, and a variety of negotiated, openended resources (see over for more detail).

Assessment

What do my students already know? How well do they know it?

Assessment **for learning** - teacher checklist of context-specific language, neutral response design sheets, photographs of party hats Assessment **as learning** - peer and teacher/teacher aide feedback during small group party hat decoration

Assessment of learning - there was no summative assessment task attached to this blended event-based and project approach

Making judgments

How will I know how well my students have demonstrated the Achievement Standard?

Although there was no summative assessment task attached to this blended event-based and project approach, by monitoring learning through the use of assessment for and as learning, and providing feedback, decisions could be made by the teacher relating to:

- what the young learners knew and understood
- · what strengths, misconceptions and misunderstandings were evident
- what were the next steps for learning.

Feedback

What do my students already know? What do my students need to learn next?

The teacher used a checklist of context-specific language, neutral response design sheets and photographs of party hats to inform feedback.

The feedback provided the young learners with progress on their learning to date (Kate, I noticed that when you sorted these rectangles, you described their colour and size), and gave specific information about what to do

The C2C Unit 2 – Mathematics Prep (V8.0) Monitoring task Shape Observation, and C2C Unit 2 – Mathematics Prep (V8.0) Assessment task Sort Shapes had been completed earlier in the year as part of a unit of work in Term 2.

next (Remember, when you are describing a two-dimensional shape, it's important to talk about its features — This rectangle has four sides; two short sides and two long sides).

Ongoing, informal verbal feedback was embedded in classroom activities throughout this blended event-based and project approach.

Curriculum intent

What do my students need to learn?

Australian Curriculum - Mathematics

Foundation (Prep) Year Level Description

The proficiency strands, understanding, fluency, problem solving and reasoning are an integral part of mathematics content across the three content strands: number and algebra, measurement and geometry, and statistics and probability. The proficiencies reinforce the significance of working mathematically within the content and describe how the content is explored or developed. They provide the language to build in the developmental aspects of the learning of mathematics. The achievement standards reflect the content and encompass the proficiencies.

At this year level:

- understanding includes connecting names, numerals and quantities
 fluency includes readily counting numbers in sequences, continuing patterns, and comparing the lengths of objects
- **problem solving includes** using materials to model authentic problems, **sorting objects**, using familiar counting sequences to solve unfamiliar problems, and discussing the reasonableness of the answer
- reasoning includes explaining comparisons of quantities, creating patterns, and explaining processes for indirect comparison of length.

Foundation (Prep) Year Content Descriptions (as applicable to this blended event-based and project approach)

• Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment (ACMMG009).

Foundation (Prep) Year Achievement Standard

By the end of the Foundation Year, students make connections between number names, numerals and quantities up to 10. They compare objects using mass, length and capacity. Students connect events and the days of the week. They explain the order and duration of events. They use appropriate language to describe location. Students count to and from 20 and order small collections. They group objects based on common characteristics and sort shapes and objects. Students answer simple questions to collect information and make simple inferences.







Queensland Government

Characteristics of age-appropriate pedagogies evident in this example of practice

The narrative of Walter created by the teacher provided the foundation for this blended event-based and project approach. Agency was promoted as the young learners planned the surprise birthday party for Walter, initiating the idea of party hats. The young learners, teacher and teacher aide then worked collaboratively to prepare for the event. The young learners were able to explore and expand on their knowledge of 2D shapes by decorate their party hats. As the young learners worked in small groups to decorate their party hats, dialogue allowed them to deepen their understandings of specific mathematical concepts, and allowed the adults to give instant feedback, guidance and challenges.

Although only five of the characteristics of age-appropriate pedagogies have been highlighted here, there were opportunities to embed each of the eleven characteristics.

Characteristics of age-appropriate pedagogies

Inviting children to consider "What if?" They encourage investigation,

inquiry and artistry to explore new possibilities and ways of thinking.

Active

Requiring physical and embodied engagement across all areas of learning. Whether this is indoors or outdoors, activity is essential in order to activate children's full potential. Their focus, concentration, motivation and self-regulation are enhanced through moving, doing and interacting within a range of learning environments.

Explicit

Making conscious for both learner and educator the relationships between the learning purpose and processes employed and the skills and understanding these processes support.

Narrative

Creative

Acknowledging the important role that personal, written, oral and digital stories play in all our lives. They support both the production and comprehension of narratives through active processes, especially play.

Playful

Encouraging children to make connections through imagination and creativity to explore alternate worlds and ways of thinking. These worlds, not bounded by reality, offer the freedom children need to innovate and enact new possibilities.

Agentic

Ensuring that children have voice in their learning. Their ideas and interests initiate, support and extend learning possibilities in order to build on their real-world understandings and experiences.

Language rich and dialogic

Ensuring that learning occurs in environments where rich language is modelled and employed by both children and educators. Meaningful dialogues between children, as well as between children and educators, are created to support thinking, learning, engagement and imagination.

Responsive

Incorporating a willingness to be flexible, to ensure that learning is always child, context, content and discipline appropriate. To achieve this, educators will balance opportunities for structure and spontaneity, openended and specific tasks, and child-led and educator-led learning.

Approach - Blended event-based and project approach

Practices*

Stimulate young learners' interests and experiences

By using Walter the puppet, the teacher stimulated the interests and experiences of the young learners. Walter became a valuable pedagogical resource in making curriculum links to the Mathematics and History and Social Sciences learning areas and the general capabilities of the Australian Curriculum.

Orientate young learners towards the staging of an event

By using Walter's upcoming birthday and his concern that everyone had forgotten, the teacher orientated the young learners towards planning a surprise party for Walter. The surprise party then became the context through which the teacher could implement learning experiences.

Orientate towards a shared outcome or the creation of a product

The teacher encouraged the young learners to plan and stage the surprise party for Walter, connecting socially and culturally significant knowledge from their homes and community. Working as a class to list what would be required for the party, the young learners included party hats. Having a deep knowledge of the Australian Curriculum, the teacher immediately saw the opportunity that decorating party hats would provide in sorting, describing and naming familiar two-dimensional shapes and three-dimensional objects in the environment (ACMMG009).

*These are examples of the Practices implemented, and not intended as a finite list.

Strategies*

Scaffold young learners' designs and plans

Neutral response sheets are open-ended graphic organisers that support agentic representation of knowledge. In this instance, the neutral response sheet took the form of a Plan, Do, Reflect sheet to support the young learners in decorating their party hat with a focus on two-dimensional shapes.

Model context-specific language

The teacher modelled context-specific language, for example, square, rectangle, circle, triangle, sides, corners, straight, curved, while the young learners were decorating their party hats.

Questions for teacher-based reflection

- How is an array of effective pedagogies ensured?
- How are holistic development and academic goals balanced?
- How is a balance between child-initiated and adult-initiated learning experiences fostered?
- How are positive personal relationships with children nurtured?
- How is playfulness in learning and teaching interactions embedded?
- How are high-quality, verbal interactions encouraged?
- How are interactions to scaffold cognitive challenge and develop higher order thinking incorporated?
- How are real-life, imaginary, spontaneous and planned experiences integrated?

Questions for school-based reflection

- How is the provision of training, resources and support considered?
- How are the professional demands on teachers, and the lead-in time required to establish new approaches, recognised and supported?

Collaborative

Being social and co-constructed. Children and educators work together to identify ways of learning and understanding through sustained shared thinking and action.

Learner focused

Recognising that all children learn in different ways and that learning is a highly individualised process. They also acknowledge differences in children's physical, intellectual, cultural, social and personal experiences and perspectives.

Scaffolded

Including such actions as modelling, encouraging, questioning, adding challenges, and giving feedback, provide the support needed to extend children's existing capabilities. Effective scaffolding by both educators and other children provides active structures to support new learning; it is then progressively withdrawn as learners gain increasing mastery.

Provision of resources to support mathematical thinking

The teacher provided the young learners with a variety of open-ended materials, including realistic, symbolic and unstructured resources for use in the decorating of their party hats. The materials, which may not have seemed mathematical at first glance, provided open-ended stimulus for the young learners.

*These are examples of the Strategies implemented, and not intended as a finite list.