## Grade 2 Unit Build It May 2009

### **Central Idea**

The properties of construction materials influence the design of buildings and structures

# **Lines of Inquiry**

Different building materials and their properties.

The structure of buildings and bridges

The materials and shapes used in making different structures

	Present	Focus	Action
Meeting 1		Review of last	AR to contact (Integrated
Pre Planning		years planner	German)
		reflection/notes	HR team to contact G (PE), n
			(Art), A (Music), (ESL)
		Plans to start unit	

#### Notes

Specialists to link to structures, materials or concepts of FORM; Connection, Causation, and Profile attributes of Thinker - Knowledgeable - Communicator - and Reflective and attitudes of

1. Revisit last years planner

Kris to outline last years unit

Concern about thematic link for Int Deu from last year (building relationships) Last years Integrated German thematic link needs changing.

2. Timeline for start of unit (currently need 1-2 weeks to complete current unit, but have started frontloading through text in class and collecting photos)

Currently looking at shape- will segue form this to structures

3. Week 1 of unit will be pre assessing what children know about 'materials' - raw materials and structures-properties of materials- where things come from, raw ingredients raw materials.

Children will be asked to bring in photos or pictures of bridges, structures, models of such for homework, and to bring in a collection of materials (for sorting)

We looked at the AIMS activities for materials to discuss which were open ended and inquiry based, and which were closed activities and busy time! Discussed 'worksheets' should be purposeful and engage children in critical thinking and decision making and should be open ended, not same-answer fill in the blanks.

(eg a cloze procedure is about comprehension- not about deepening understanding of materials or structures.)

4. Go through Victorias email April 3 re Project: AR to ask CKp to search out permission slips form parents (IB) JB and KV to diary digital photos and select some for project file.

Meeting 2	Timeline unit	
Planning 1		

File maintenance- Gd 2 shared folder/Build It/Project - AR - Meeting notes

Set dates, timelines and procedures for planner project data collation

Videographer dates - look into our proposed timeline for closure of this unit- at end of school.

Last week- sports day, concert, leavers assembly....

26<sup>th</sup> May-parent openhouse for this unit

1June- no school

Videographer- 2-5 June, before finished, most learning complete- ready for assessment and any personal inquiry.

Plan to complete summative assessments Wed 3-Mon 10<sup>th</sup> June

Students will reflect from 10<sup>th</sup>-12<sup>th</sup> June

We need to carry out our reflection and closure of the planner on Mon 15 June 1330 (day early as Sports day on our usual meeting day.

Meeting 3	Review	
Planner 1	assessment piece	
April 28	and	

1

Review pre-unit/formative assessment applied this week. What do the students know already- do we need to change our planning?

Class 2B- materials sort- man made versus manufactured versus natural. Naming of materials a challenge, lack of vocab to describe properties.

Children need increased experience with materials and adjectives work to describe properties before we move to materials and properties suitable for construction and structures.

Class 2V- Word sorting and classifying- brain storm of words connected with the unit- class sorted into three suggested main groups- Buildings materials- homes.

Homes an interesting choice!

Children need to become more familiar with buildings and structures and materials to be able to take understanding and thinking further.

### NEXT step-

1. Children need to start work on looking at buildings and structures around them... what are our definitions of buildings versus structures?

(See our selected definitions decided upon on planner)

- 2. Start work with the children on looking at shapes used in construction- our own school is timber framed- Naurod ahs lots of Fachwerk (Half-timbered) houses as well as modern buildings to compare visible shapes when we go on the walk with Frau for integrated German.
- 3. Develop vocabulary and further experience exploring properties of materials and move to identifying construction materials so we can look at particular properties of these materials for construction purposes. Strength of materials will be key.

Look at 3 little pigs as an introduction (AR has versions in several languages- be aware that not all children will be familiar with this – check different cultures.)

4. Ask Martine to carry out a search in library on literature that may have properties of materials links.

Meeting 4	Review progress	
12 May	to date and	
Week 3	permission letter	

Fr organized the trip to the Architect museum and the workshop on skyscrapers

Mr Rapp coming in (Structural Engineer) (parent from last year) Mon or Wed next week about bridges and the building of bridges and materials for bridges

Thomas architect- to visit integrated German

Revisit Summative Assessment with a mind to our central idea/ proposal that we make sure the task is about 'structures' and properties of materials and design, rather than just about bridges.

## Rework line of inquiry 3 to:

The materials and shapes used in making different structures stable and able to support weight

We defined our criteria for assessment of the final task.

Kris shared some samples of the charts her class have produced classifying buildings, materials, purposes and age. She will see if these can be scanned into our 'evidence' folder

Open house to take place on May  $26^{th}$ , In PE students will demonstrate what they have learned about push and pull and will build human structures.

In class students will have the "3 Little Pig" challenge with their parents.

Meeting 5	Review progress	
26 May	to date	
	Prepare for	
	Andrew -	
	videographers	
	visit	

Formal sessions with videographer (AR to contact Andrew about details of visit.)

Bridge experiments this week.

Starting group bridge work next week with newspaper, / scaffolded tasks to lead to open ended challenge. Possible recordings

- Discuss with children the learning of the Architects museum to enable the task
- Teachers meeting reviewing rubric outcomes for assessment / any adaptation for individuals/ ESL or LS
- Looking at reflection section
- Straw and Hay building, Straw and tape, Toothpicks and clay
- Kris V PE next Wednesday 9:50
- Notetaking to video- megastructures and compare to another structure already learned about.