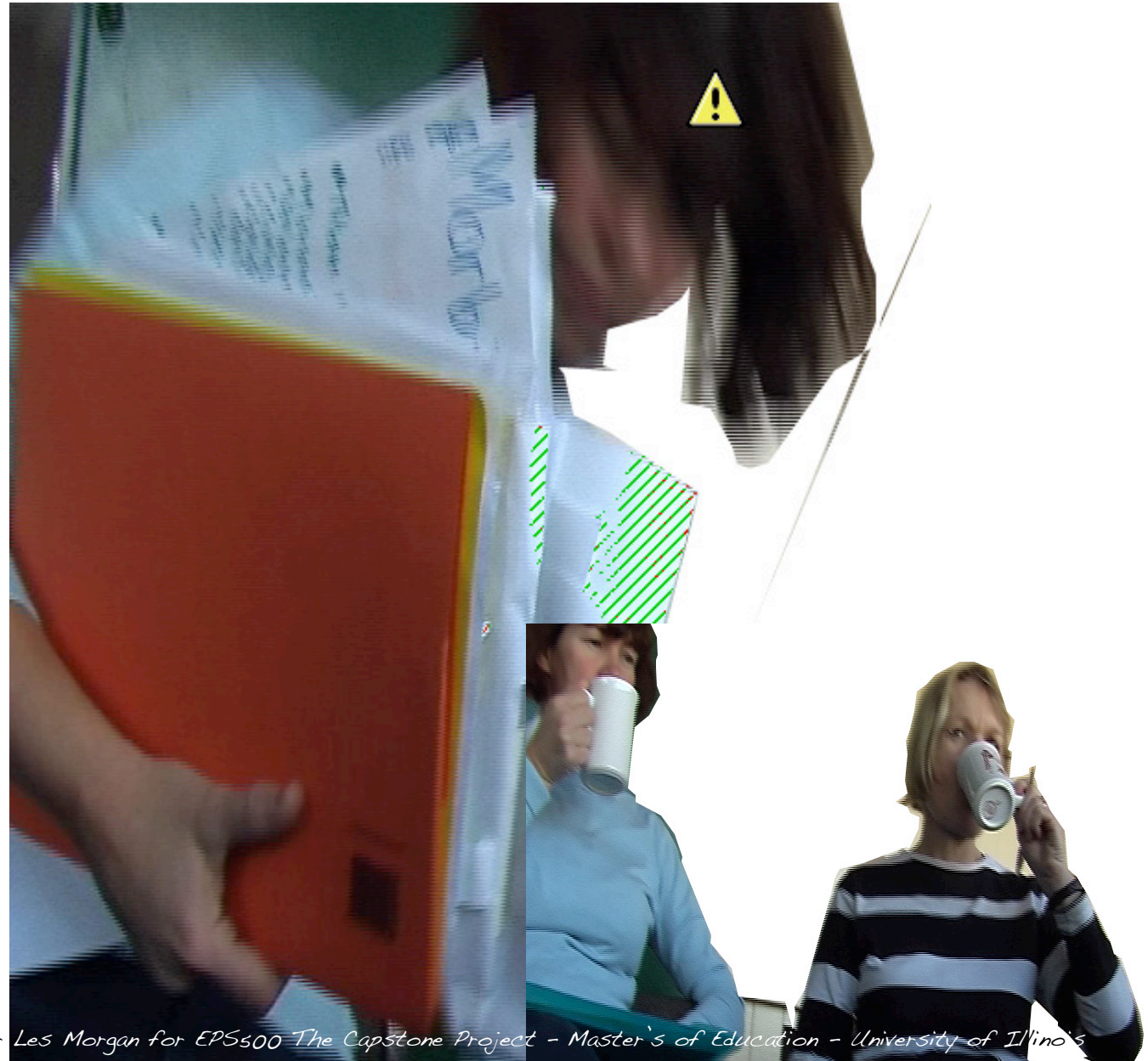


# Getting started with Learning by Design

## *the design phases*



Created by Dr Peter Burrows & Dr Les Morgan for EPS500 The Capstone Project - Master's of Education - University of Illinois

## *Getting started with Learning by Design*



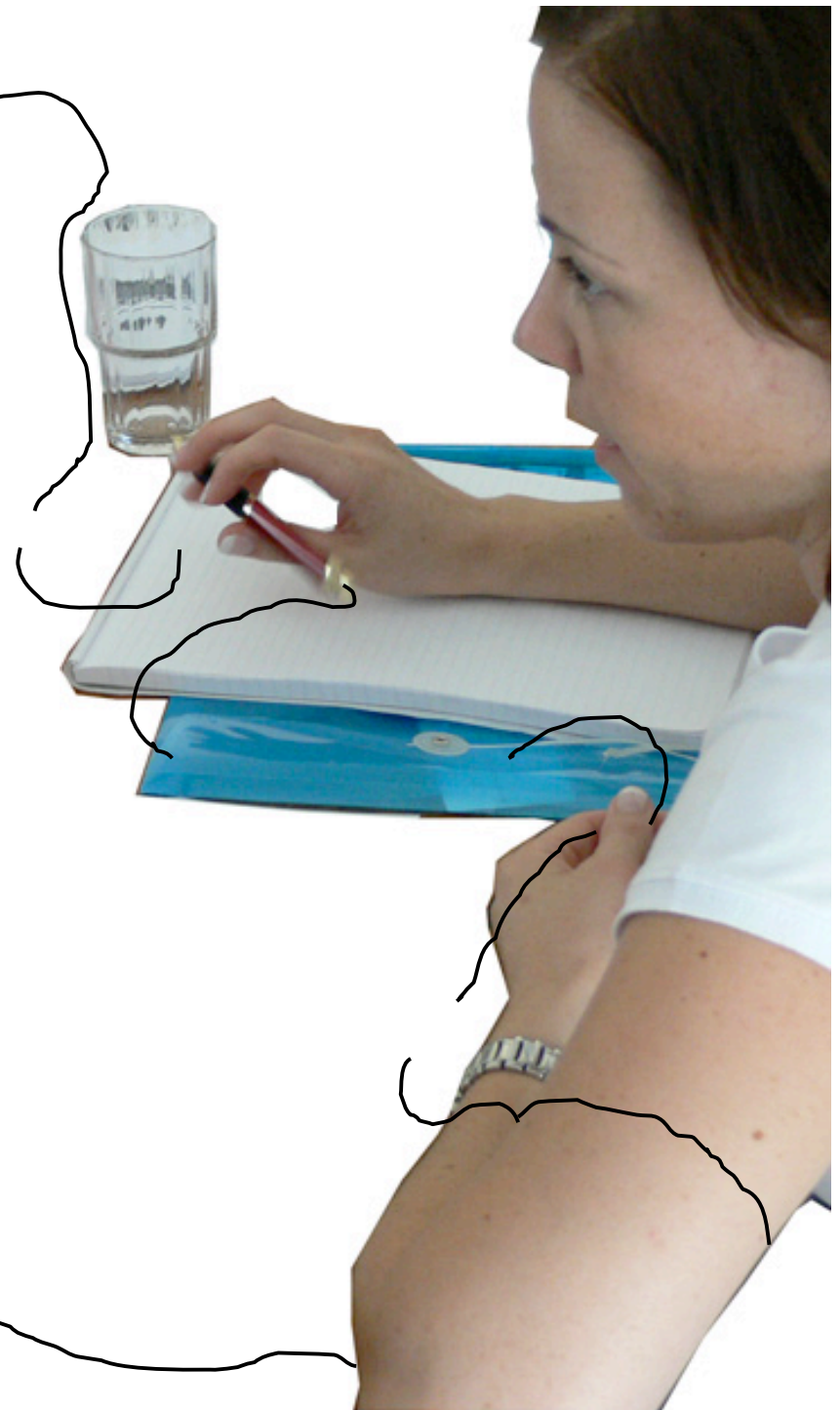


## Getting started

There are a number of different *design phases* that we have observed teachers engage in when working with Learning by Design.

These phases are worked through in different ways by different teachers. This means it is best to use tactics and techniques that work for you.

The tools and tactics set out on the following pages are meant to illustrate the different phases and are a way of getting started with Learning by Design.





# Teacher-as-designer design phases

Ideation

Representing & Communicating

Formalising & Publishing

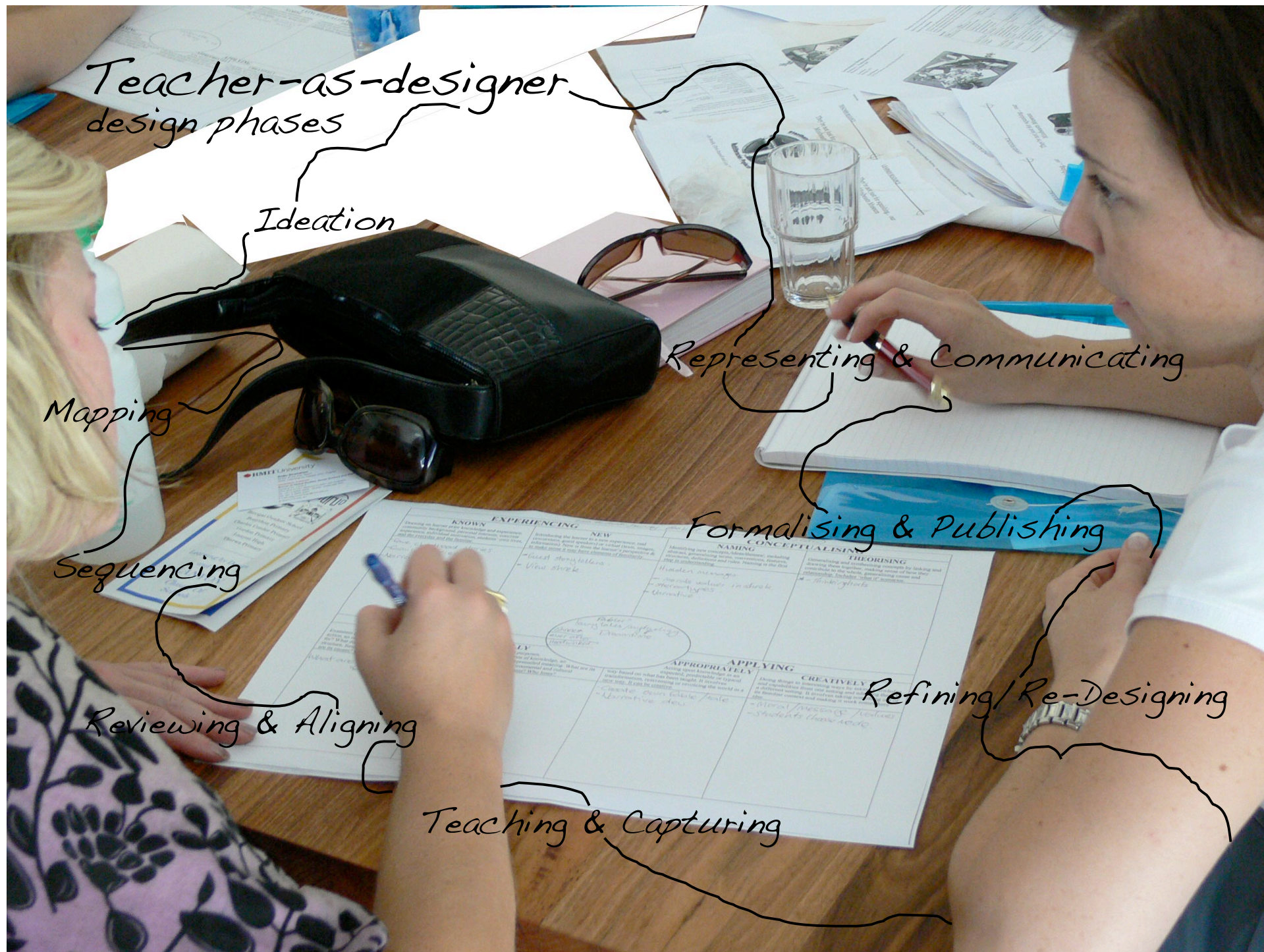
Refining/Re-Designing

Teaching & Capturing

Reviewing & Aligning

Mapping

Sequencing



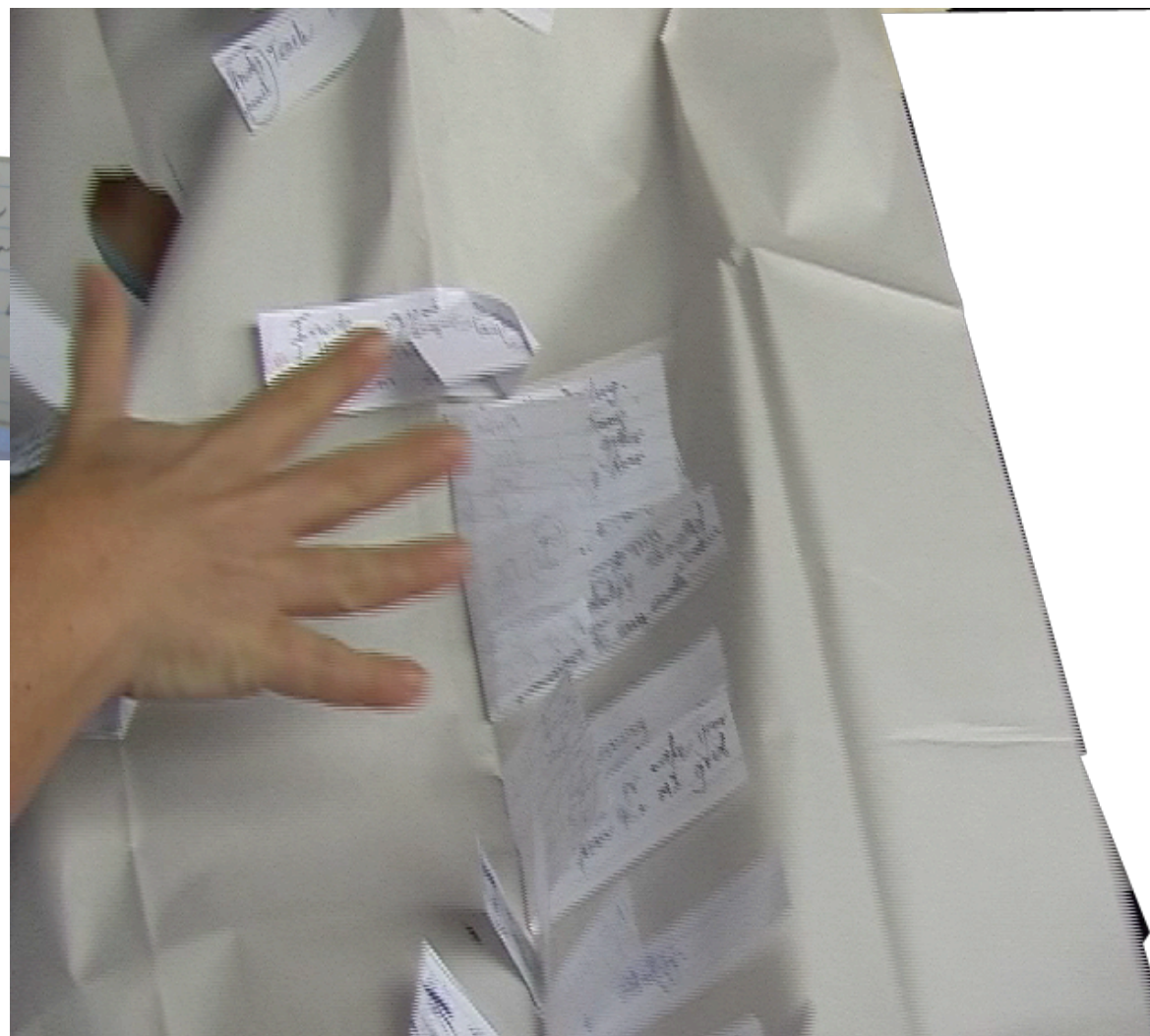
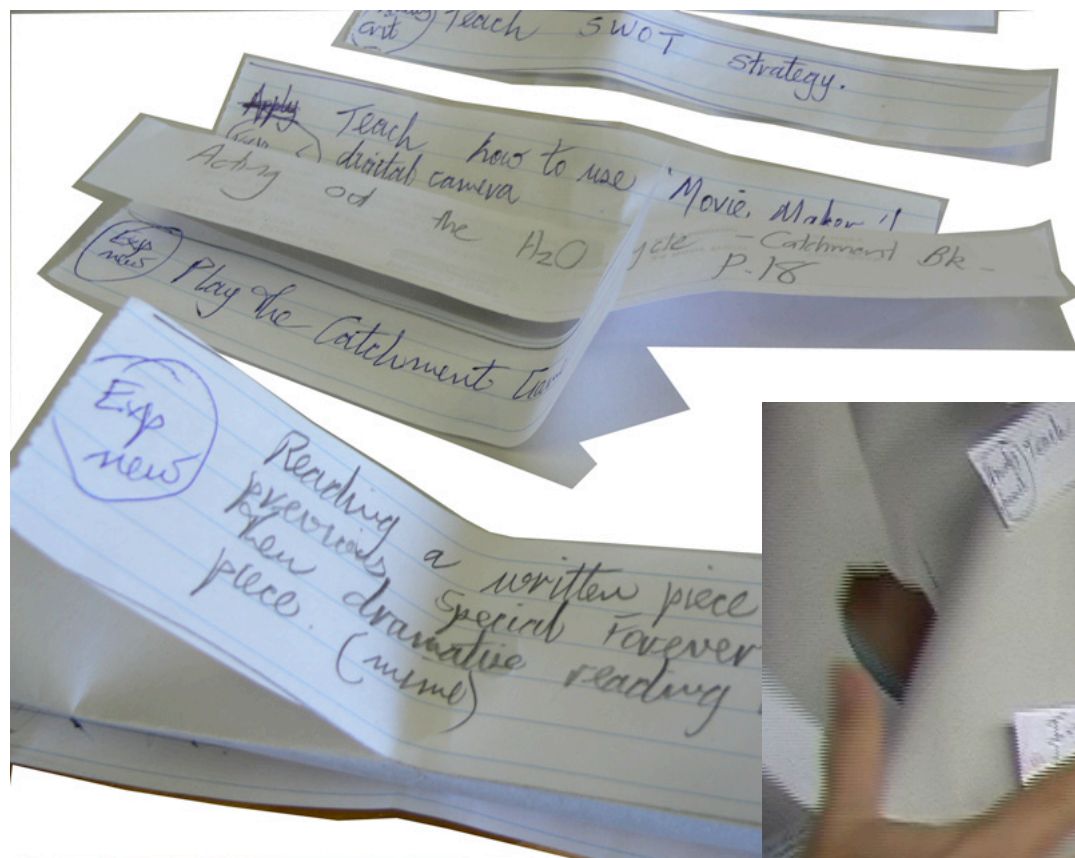


# ideation

*The first phase of designing we call ideation. This is where teachers generate ideas they can use in the classroom. Begin by identifying a big idea, a guiding question, topic or project theme for a unit of work which fulfills a system, school, or curriculum requirement and generate ideas for activities - brainstorm using butchers paper or post-it-notes - which address this big idea or topic and that provide for student engagement and deep understanding. This phase is all about generating ideas.*







(crit) Teach SWOT strategy.

~~Apply~~ Teach how to use digital camera  
Acting od the H2O gate

Movie. Markov '1  
- Catchment Bk -  
P-18

(Exp new) Play the Catchment

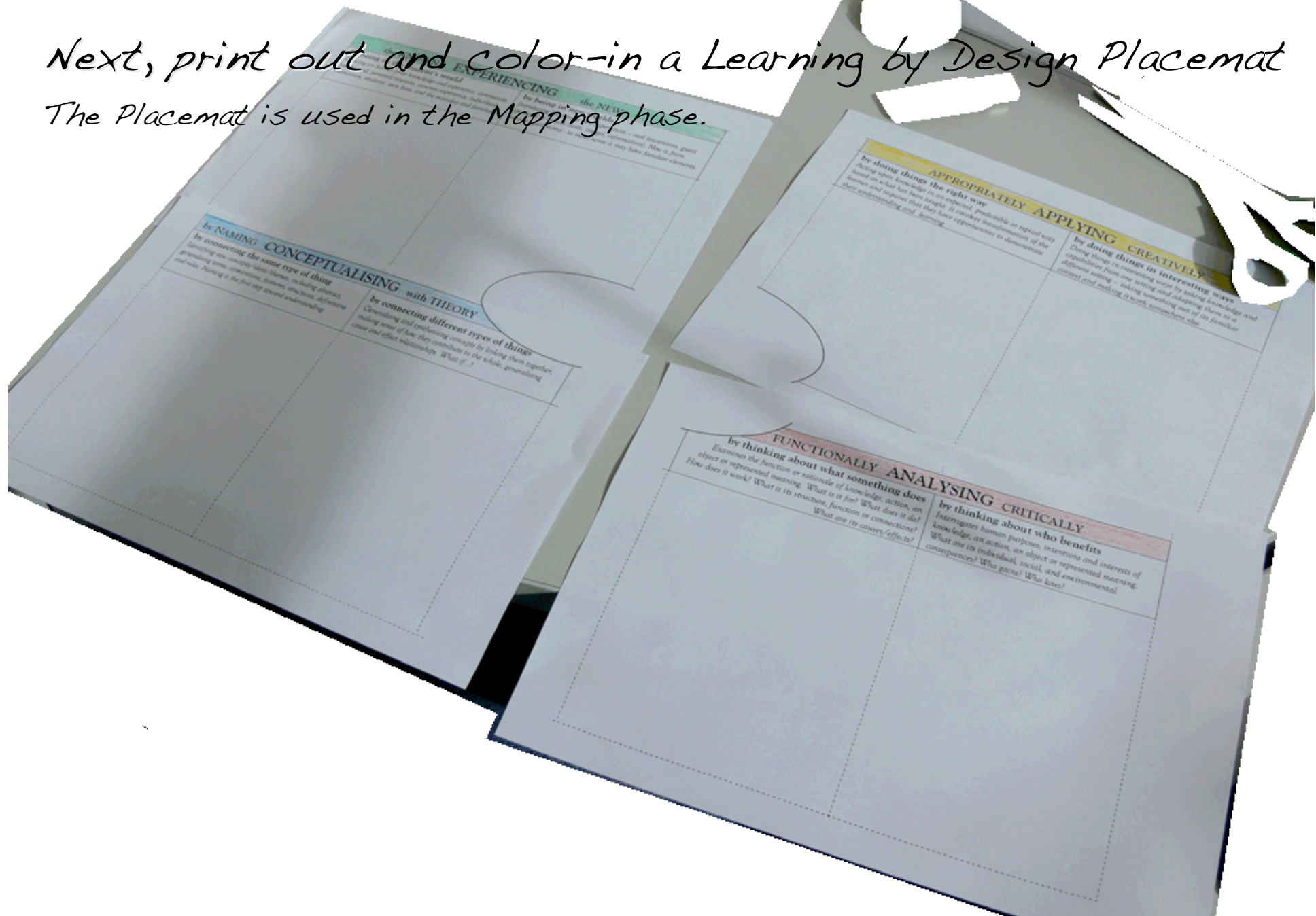
(Exp new) Reading a written piece from previous special Forever books & then dramatic reading of this piece. (mime)

The ideation phase is all about generating ideas.



Next, print out and color-in a Learning by Design Placemat

The Placemat is used in the Mapping phase.







# Mapping

The LbyD Placemat allows teachers to map activities which they have generated on post-it notes in the ideation phase to the Knowledge Processes on the Placemat. They can then talk about, sort, refine, re-write, cull or add activities to their designs so as to achieve a balance of pedagogies. In so doing, they can identify and address any gaps, e.g. Have I included experiencing the known activities in my design?

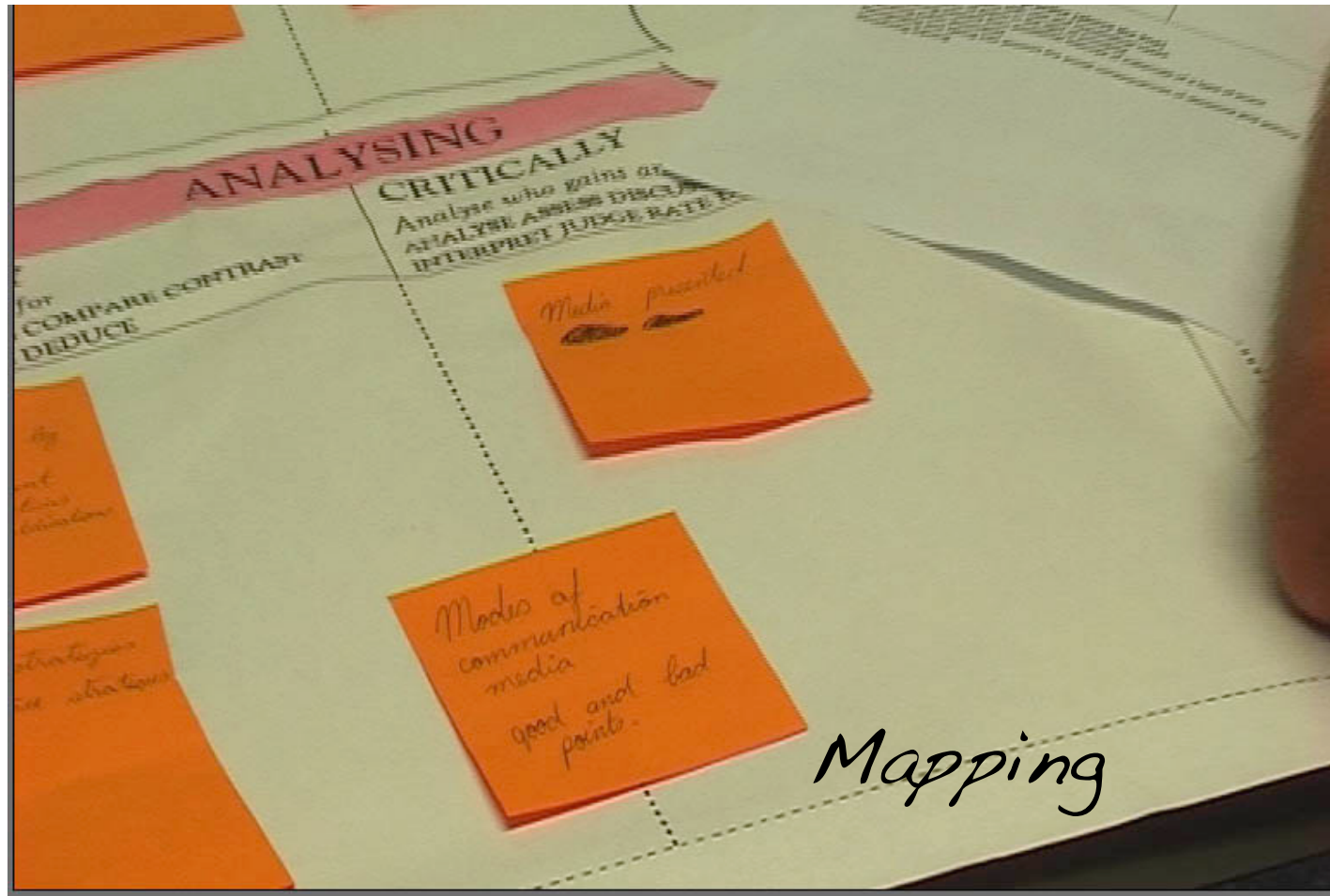


# Mapping



Marea's hand moves across the Placemat as she talks, sorts and refines her design. In so doing, she demonstrates to Julia, her colleague in red how each of the activities maps to the knowledge processes and how they all contribute to the purpose of the learning.

Here we see a close-up shot of a Placemat. After some discussion, the learning activities are positioned against the appropriate knowledge processes on the Placemat.



Why do you think one orange sticker sits in-between Analysing Appropriately and Analysing Critically?

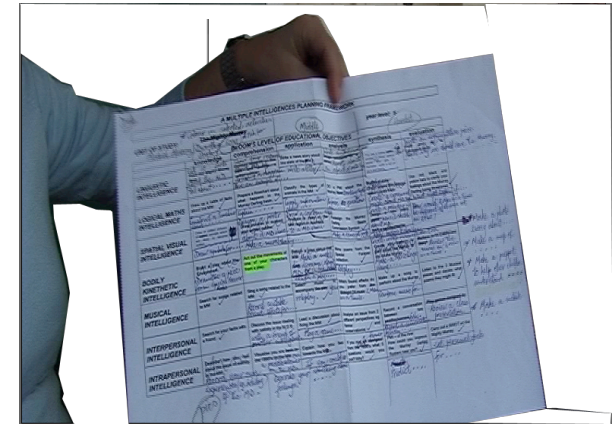


*The Mapping phase encourages thinking and reflecting. In a group setting it encourages a dialogue and discussion that seems to be at the heart of the design process and of coming to understand....*



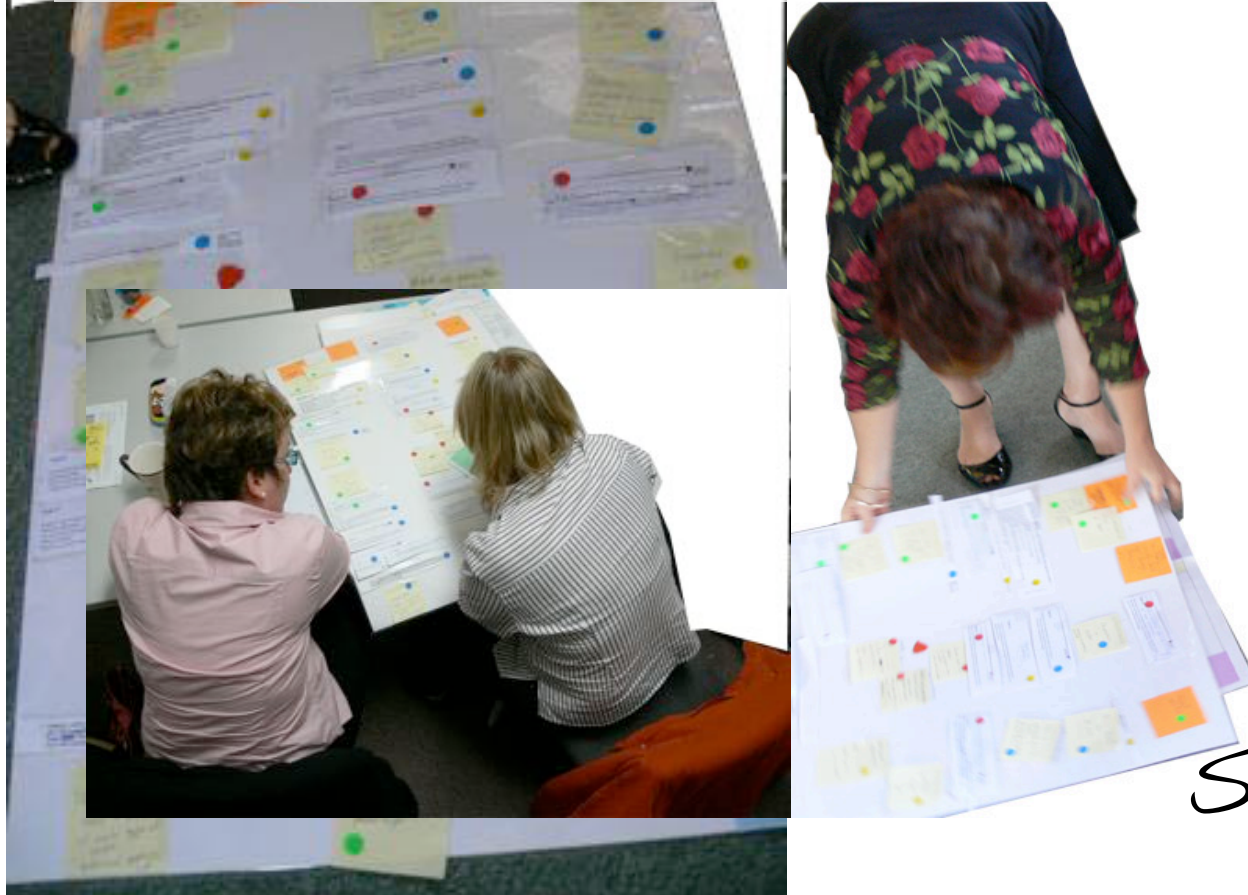
*The Learning by Design Placemat can be used in a number of ways: to stimulate thinking and reflecting; mapping out new designs; mapping existing plans; mapping and analysing the designs of colleagues; introducing the Knowledge Processes to others.*

Or, the Placemat can be used to map and re-design a topic that you have already taught.





*In the Sequencing phase teachers scaffold the learning by labeling or attaching colored dots to the activities, or marking them with color, to represent the Knowledge Processes, then placing the activities into a teaching sequence. In this way, the learning is purposefully designed to ensure that there is an effective mix of pedagogies, that the activities connect well one with another, either building on those activities which came before or supporting those that come after, and that each activity is relevant to the learning and has 'earned its keep'. Activities can be culled or new ones added.*



*Sequencing*




# Sequencing

Colored dots representing the knowledge processes are matched with the activities to show how the pedagogies can be sequenced to achieve a balance of pedagogies.

A good design will feel coherent and connected: there will be a strong sense of a 'through-line' existing between the activities. At this point the teacher may review the sequence of learning to ensure that the mix of activities addresses the diverse needs of her students.





With Learning by Design  
there's a recognition that  
learning isn't just planning  
a series of tasks!

Using the Knowledge  
Processes we have to keep  
asking ourselves 'How does  
that activity contribute to  
the learning and to what we  
want our kids to achieve?'



# *Reviewing and aligning*

*Are my activities matched to my learning goals?*



# Reviewing and aligning

*In this phase the designers are reviewing their activities against their learning goals.*

*What do we want our learners to achieve? How?*

*Is this the right activity to achieve that goal?*

*How do our activities connect one with another?*

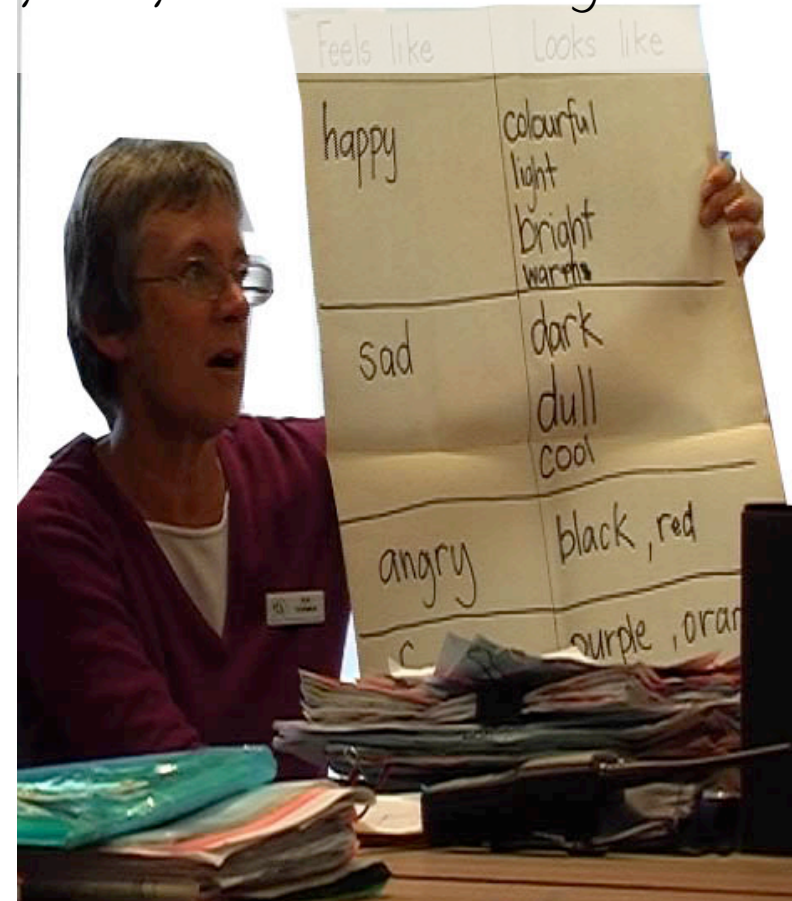
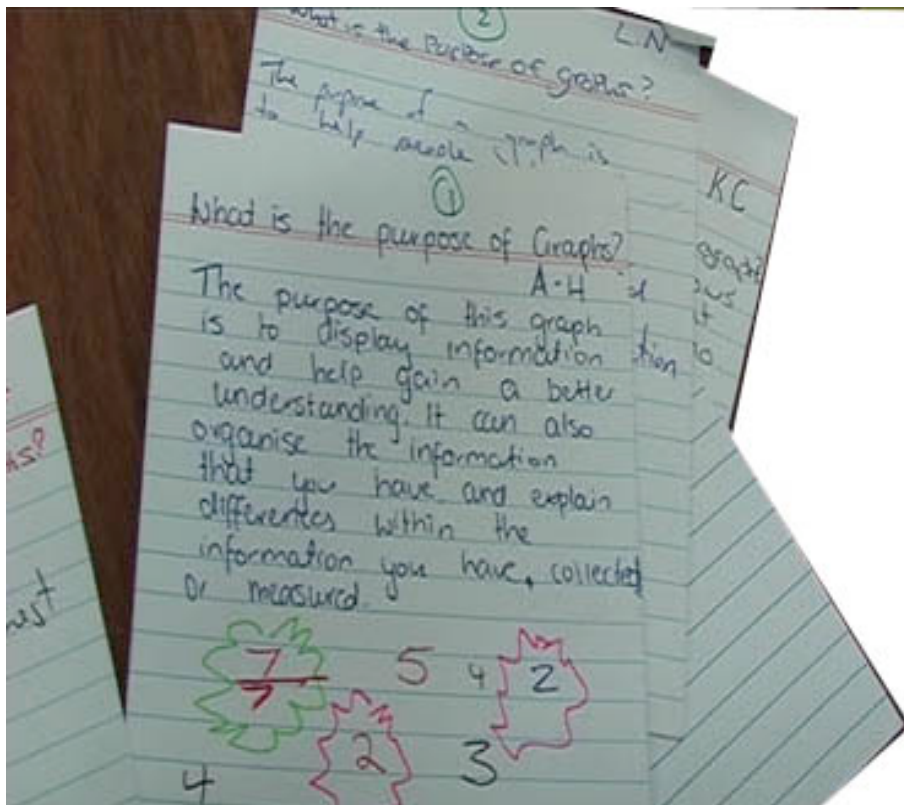
*Do our activities build on those that come before and scaffold those that come later?*





# Teaching and capturing

The teacher-as-researcher teaches and captures evidence of learning: the *before-during-after* responses of students to the activities she has designed along with multimodal 'snapshots' that capture or preserve the ways in which learners are learning. She captures video, audio or images; she documents the process; and collects artefacts and examples of student work. These artefacts of learning are annotated, analysed, and related to the design, and inform the refining and redesigning that takes place prior to formalising and publishing the design as a Learning Element.

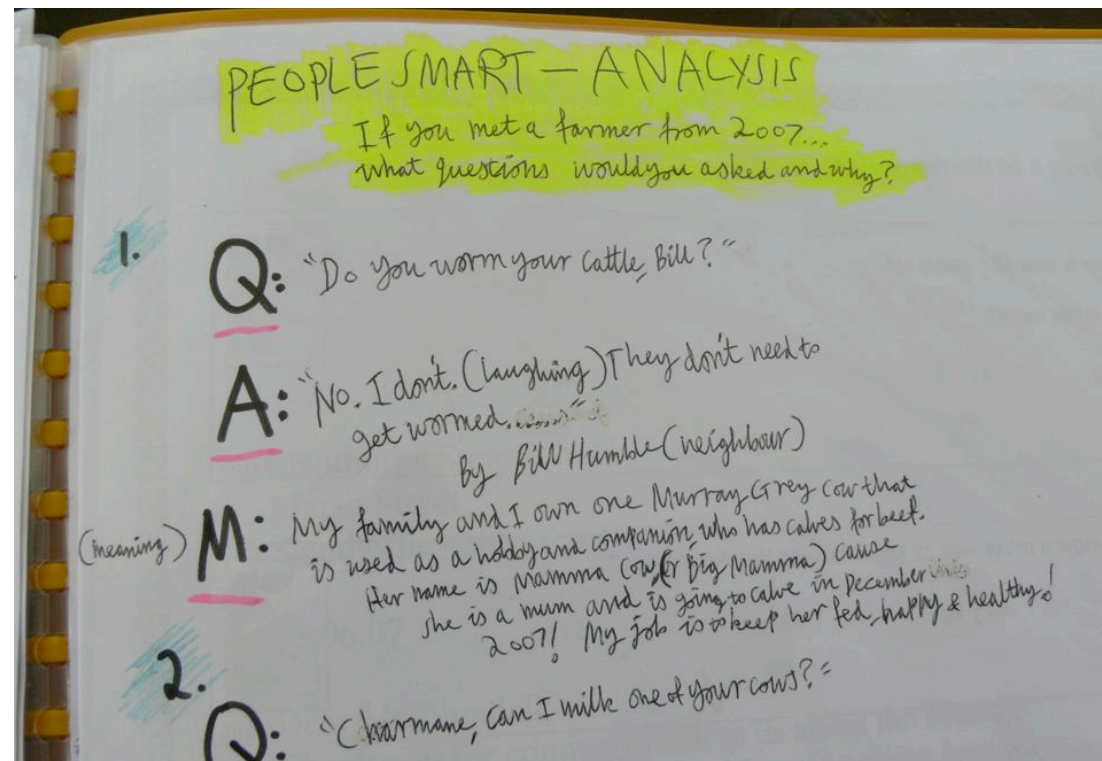
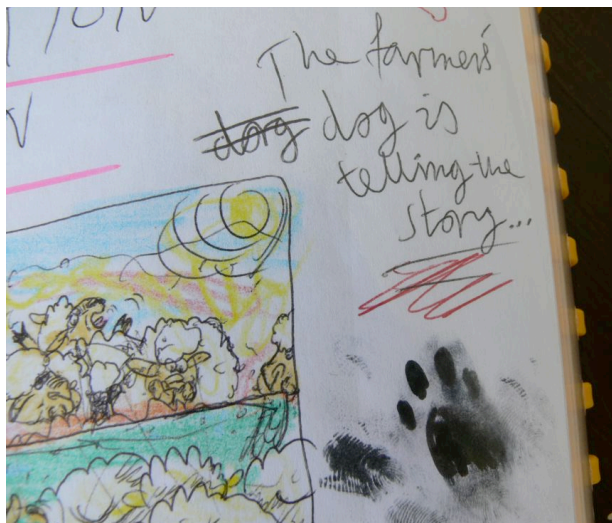


# Teaching and capturing

The teacher is using these few examples of student work as evidence of...

Using the cartoon strip created by the student as a bridge the teacher could...

What are the concepts and theories the teacher has been teaching prior to this work?






# Formalising and publishing

The design can now be transferred to a Learning Element which is reviewed, discussed, published and taught, then reviewed once more and changes made.



TEACHER RESOURCE

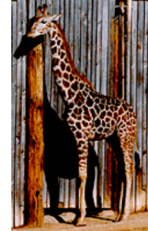
Problematising zoos through 'Zoo' by Anthony Browne



Rita van Haren

LEARNER RESOURCE

Zoos are not really for animals



Rita van Haren

**Analysing the visuals**

Add two more columns to the retrieval chart. Students record the effects of the use of colour, framing, demands and offers, and line. For example in the table students might record that the sombre colours make the animals seem sad. The bright clashing colours suggest the humans are clashing with nature and evoke a cool response from the reader. The framing suggests caging while the lack of framing suggests freedom. The framing also identifies groups and group identity – humans and animals. When the humans become more animal like, they too are framed as a group. The demands make you look at the eyes first when you look at the image. They gorilla image demands empathy. The humans are on the left hand side (given) and the animals are on the right hand side (new). The information we know (given) is that zoos are for people. The new information is that zoos are not for animals

*Text User*

**What do the visuals do?**

	Animals	Humans
Colour		
Framing		
Demands and Offers		
Line		
Focus on left and right sides of each double page spread		

**Positioning the audience**

Through an individual written reflection students respond to questions about the effects of the visuals on the reader.

Students use a T Chart to analyse the positives and negatives of zoos based on the information presented in Zoo.

**How does it affect us?**

What do you think about the animals in Zoo?  
 What do you think about the humans in Zoo?  
 Are they happy or sad? Why? Why not?  
 Why has the author made these choices to present the people and animals in this way? Record all the positive and negative messages/ideas about

*The review and critique of an existing design: 'We are critical friends.'  
In the context of Learning by Design, teachers become peer-coaches and mentors of each other.  
As you create your initial Placemat designs, and later Learning Elements, you will be asked to review, comment and critique the designs of your colleagues.*

## *Formalising and publishing*





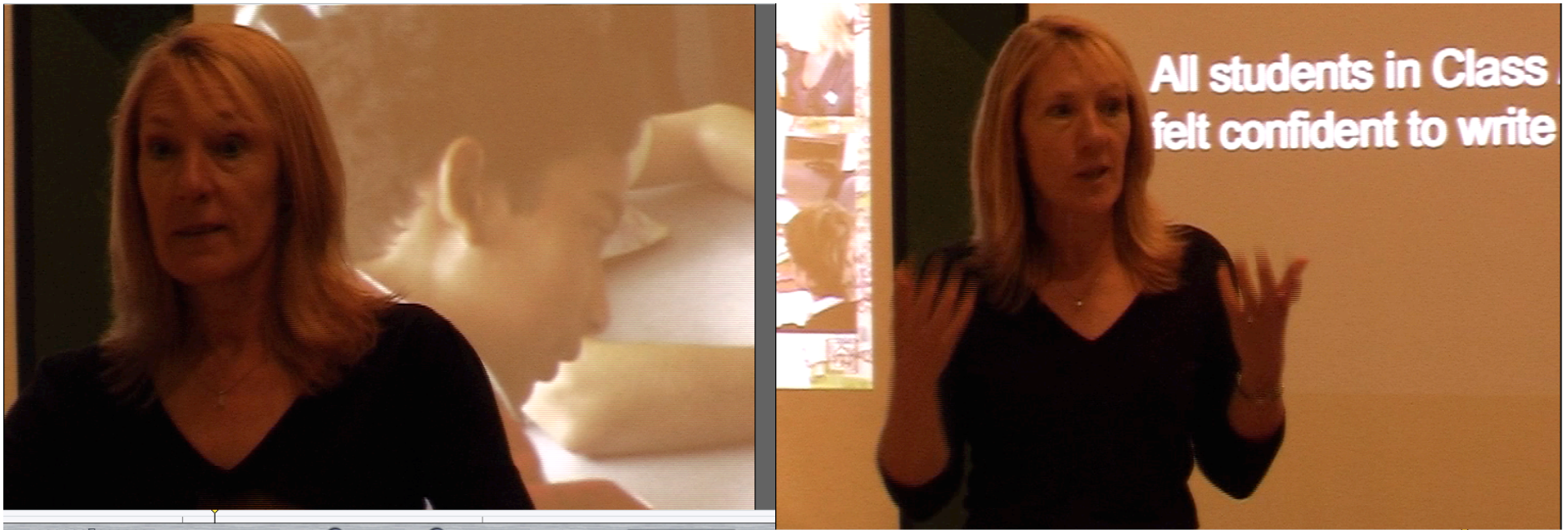
# Representing & communicating

*A teacher-researcher films an interview with a teacher concerning her multimodal practice and use of the Knowledge Processes of Learning by Design. This short film then becomes a durable artefact that can be used by the teacher and others to discuss and reflect on.*



# Representing & communicating

*In this image we see Anne Dunne presenting a video of her students working on activities designed using the Knowledge Processes of Learning by Design.*



*Along with about forty of her colleagues from the Learning by Design project Anne Dunne was presenting her work to several hundred teachers, academics and scholars from all round the world at an international conference. Anne drew on evidence from her practice to support her view that the Conceptualising and Analysing Knowledge Processes were at the heart of deeper learning for her students as well as providing a means for stronger and more sustained engagement. Her presentation was articulate, professional and compelling, her claims well supported and demonstrated.*



# Representing & communicating

*In this series of images we see teachers from an Elementary School in Australia involved in a Learning by Design professional development workshop organised and facilitated by the five teachers from this school who were part of the research project.*



*The teachers can be seen using the same tools - Placemat, post-it-notes and group discussions - that were used in the research-workshops. The teachers organised and facilitated this full-day professional workshop without support from the research team. They have subsequently facilitated three more workshops with their colleagues.*

*This phenomenon was common across all research sites.*

# Representing & communicating

Crucial to the 'Representing and communicating' agenda is the need to be a teacher-researcher. Without the artefacts of practice, the films, the photographs (of just about everything that moves or not in the classroom and beyond), audio recordings, the Placemats, the rough hand-drawn notes, the Learning Elements, the examples of student work (evidence), interviews with students then the task of representing and communicating what-happened-how is impossible.

Being a teacher-researcher means paying systematic attention to your practice and capturing and collecting artefacts of that practice for analysis and discussion.

