



Pedagogic Development – Enquiry Based Learning for Constructed Textiles

Textiles and Paper, School of Materials
Kate Sayer, Jacquie Wilson, Barry Hyde,
Lindsey Taylor



The Project

- Aims
 - To create an EBL environment for constructed textile design through a blended learning approach
 - converting weave design lectures into EBL.
 - To use WebCT to clarify curriculum objectives and study techniques.



The Project

- Objectives:
 - Match teaching methods more closely with student learning styles
 - Promote deep and holistic learning
 - Promote a vibrant and stimulating learning experience
 - Ensure students are at the centre of the learning environment



The Project

- Outcomes
 - EBL units for the module TX2009 Weaving for Designers
 - WebCT unit detailing appropriate student centred learning approaches
 - Journal/Conference papers



Rationale

- Learning how to weave
 - Hard for designers
 - Visualise 3D structures
 - Understand manufacturing processes
- TX2009 Weaving for Designers
 - Traditionally taught
 - Lectures, laboratory classes, written exams
 - Observations showed students not understanding topics fully

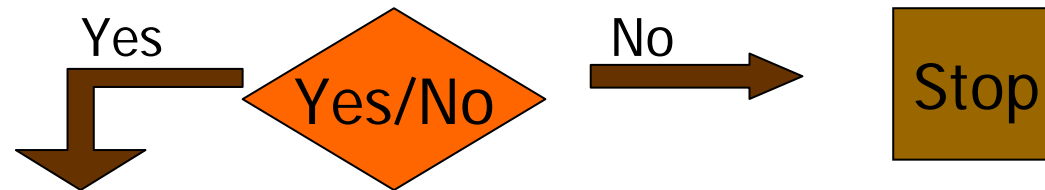


The Process

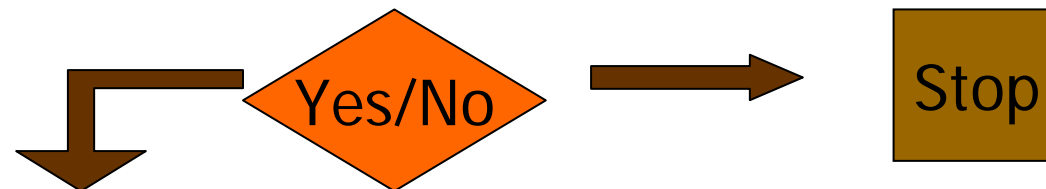
1. Identify problem areas in syllabus
2. Trial task
3. Observations and reflective questionnaires – evaluate
4. Further development of EBL units
5. Implementation into syllabus
6. Development of WebCT unit
7. Monitor process

Topics for conversion

Q1.Does this topic involve design?



Q2. Could this topic be taught on hand looms?



Convert into an EBL module



Topics for conversion

- Three key areas identified:
 1. Double cloths
 2. Drafting/Unit Drafting/Lifting
 3. Extra Weft
- Unit drafting to be used in EBL trial



Trial Day

- Task set one week before day
 - Groups of four
 - Teams had to design, plan, draft and weave a table mat for Ikea
 - Mat had to have a structured centre panel with structurally contrasting borders
 - One day task took place in Consolidation week

Trial Day



Trial Day



Trial Day



Trial Day





Evaluation

- Observations
 - Teamworking skills strong
 - Group size could be made smaller
 - Become fully involved in process
 - Groups of 3 for future
 - One day task perhaps too long
 - Teams only just got the project done in the time allocated
 - Reducing time may keep momentum up
 - Two hour teaching time + up to 6 hours of own time
 - Tasks would be modified



Evaluation

– Planning

- 8 out of 14 students commented that they would plan more if they did the task again
 - This stage must be stressed

– Marking criteria

- Technical ability, colour, suitability, group dynamic, design process
 - Reflective written report documenting process to be submitted for assessment



Evaluation

- Practical design work
 - Attention paid to weave structures in summer assessments – unit drafting had been used by some students
 - Extra weft and double cloths to be used in future

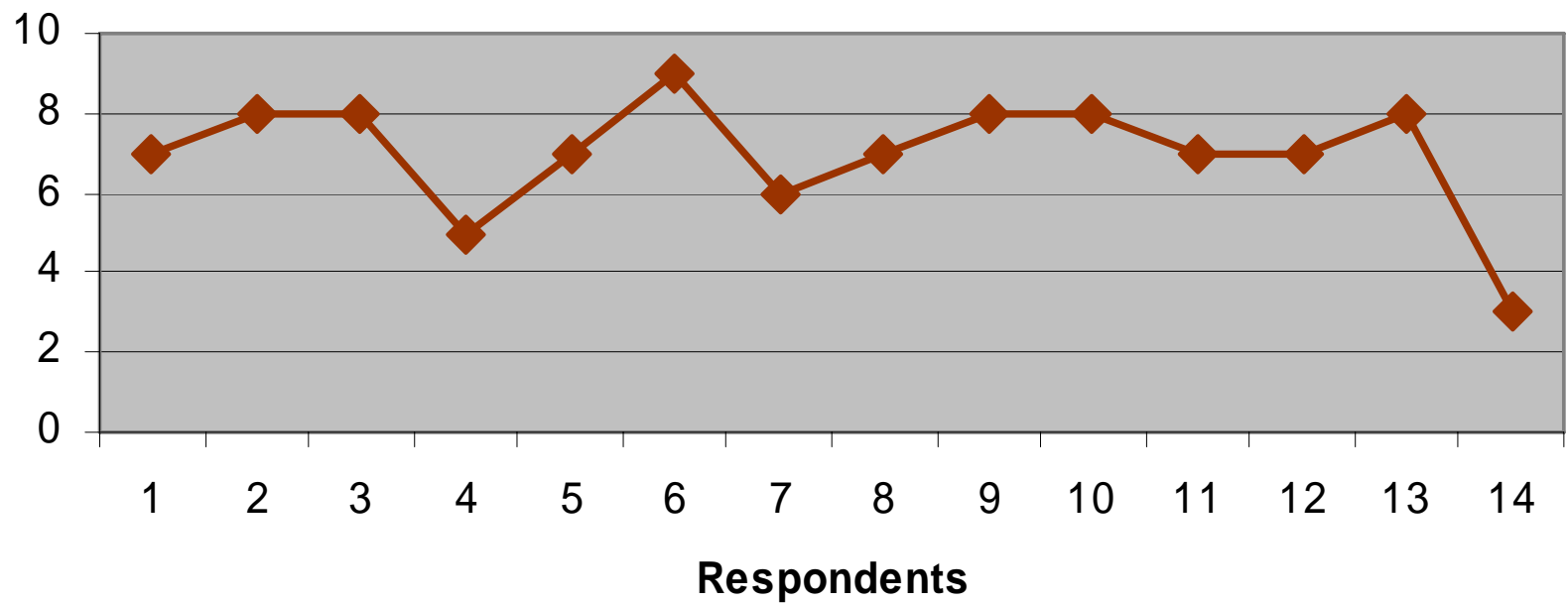


Evaluation

- Reflective student feedback sheets
 - 9 out of 14 enjoyed the task
 - 9 out of 14 would like more EBL tasks
 - 12 out of 14 thought the task helped their understanding of Unit Drafting
 - 13 out of 14 thought the task helped their understanding of Weave Structure

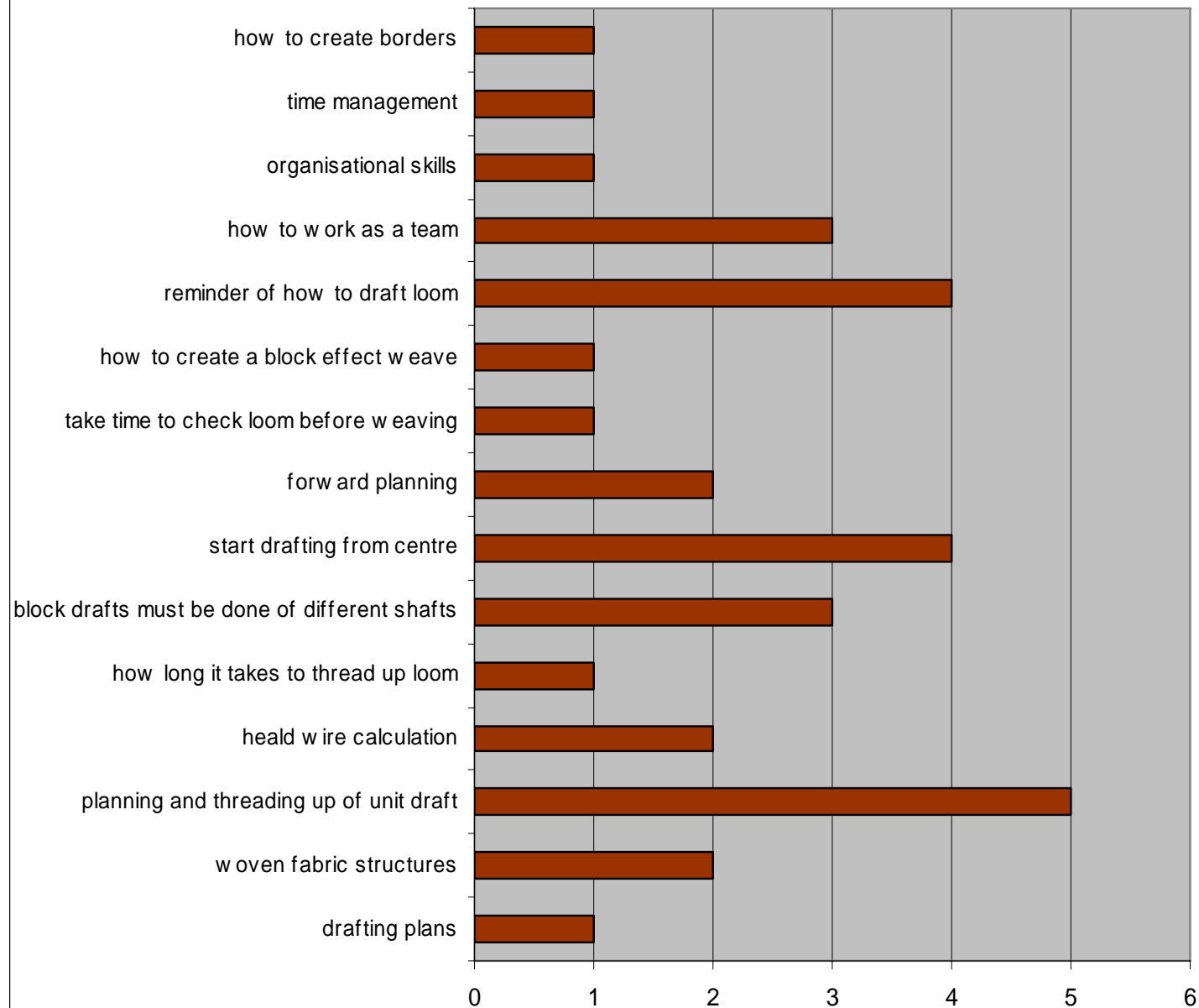


Q2. How much do you feel that you learnt through this exercise (1 a little through to 10 a lot)

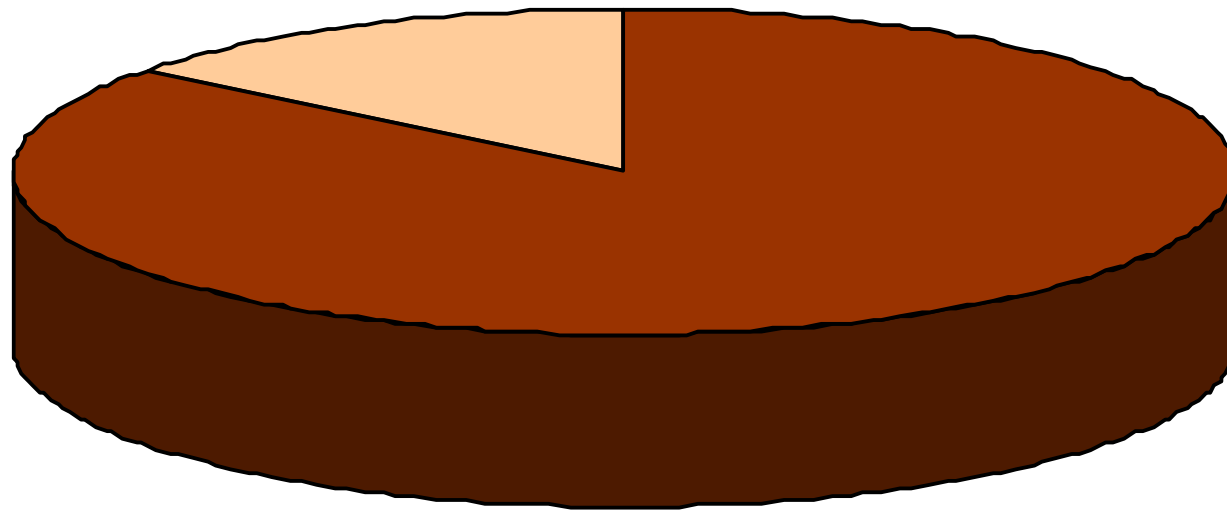




Q3. What have you learnt through this exercise?



Q5. If you could re-do the task, would you approach it in a different way?



■ Yes
■ No



Further work


- EBL tasks for curriculum developed
 - Unit drafting – design and create a drinks coaster with contrasting border.
 - Extra weft – design and create a bookmark with a motif.
 - Double cloths – design and create a further drinks coaster - must be colour reversible and demonstrate thermal insulation qualities.



Further work

- WebCT unit
 - Preliminary site containing:
 - Subject specific info
 - EBL info
 - Mail
 - Self test
- Further funding received by School to develop WebCT more widely.



myWebCT Resume Module Module Map Check Browser Log Out Help

Control Panel

Kate Sayer's Demo Space

View Designer Options


▼ Module Menu


Home Page
e-Learning Hub
Teaching Content


Home Page


Constructed Textiles Homepage

Welcome to the Constructed Textiles WebCT portal. This learning environment is to support the theoretical and practical teaching of knit and weave structures throughout the TDDM programme.



Teaching Content


Enquiry Based Learning


Mail


Self Test



myWebCT Resume Module Module Map Check Browser Log Out Help

Control Panel

Kate Sayer's Demo Space

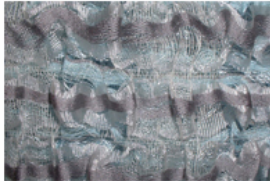

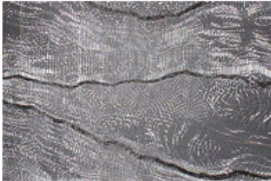

View Designer Options

▼ Module Menu Home Page > Teaching Content

Home Page



e-Learning Hub

Teaching Content



Teaching Content

This section contains information about constructed textile design. There are two content sections, knit and weave. These contain notes and tutorials, animations and film clips and the PBL tasks which you will complete as part of your TDDM programme



Weave

Knit



Further work

- Knock-on effect
 - Change 1st year weave curriculum into workbook of practical exercises backed up by tutorials
 - Prepare students for EBL in the 2nd year.



Thank you.

Any Questions?