ADAPTIVE TEACHING OF DIGITAL PATTERN CUTTING

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WHO ARE WE?

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ADAPTIVE DIGITAL PATTERN CUTTING

The Dilemma…

*How do you teach a software when the students can't access the software?*

This presentation will detail, explore and analyse the strategies and transformations made to both practice and delivery in order to facilitate inclusion and parity for all students during COVID digital pattern cutting sessions.
THE JOURNEY OF LOCKDOWN

- Regular Course Team Meetings
- LEARN HOW TO USE COLLABORATE & TEAMS
- PLAN SESSIONS
- BEGIN ONLINE DELIVERY
- DESIGN NEW LESSON STRUCTURE FOR ONLINE DELIVERY
- RE-DESIGN SUBMISSION REQUIREMENTS FOR COVID
- LEARN FROM TRIAL & ERROR
- SUCCESS

BEGIN ONLINE DELIVERY

LEARN FROM TRIAL & ERROR

RE-DESIGN SUBMISSION REQUIREMENTS FOR COVID

PLAN SESSIONS

DESIGN NEW LESSON STRUCTURE FOR ONLINE DELIVERY

LEARN FROM TRIAL & ERROR

SUCCESS

BEGIN ONLINE DELIVERY

LEARN FROM TRIAL & ERROR
WHAT DO THE STUDENTS HAVE ACCESS TO?

• No access to site
• Located worldwide
• We assume all students have access to a laptop or desktop computer.
• Student licences for Lectra are available, but not all students have access due to laptop compatibility.
• No Student licences to Optitex or Gerber.
• No access to specialist hardware related to the software delivery.
• Access to the Adobe Suite.
ADAPTING TO A CHANGED ENVIRONMENT

• Conscious not to shy away from the software knowing students would still be required to use the software on their return to site.

• Understanding the medium; recreating the user experience of Lectra for online delivery by capitalising on prior Lectra learning.

• Design digital content to ensure student engagement and attainment (PowerPoints & demos).

• Resources developed to support this mode of learning:
  ▪ Crib sheets/handouts
  ▪ Worksheets
  ▪ ¼ and ½ scale blocks
RE-DESIGNING THE SUBMISSION REQUIREMENTS

- Technical Sketch of garment
- Evidence of the block being used.
- Develop a proposed workflow of how the pattern would be created using the software.
- Evidence of a final production pattern
- Lectra worksheets – Variant, Marker Manager.
- ¼ scale lay-plan created on illustrator.
ENGAGEMENT WITH LEARNING RESOURCES

Lectra Variant Template

Student Lectra Variant
ENGAGEMENT WITH LEARNING RESOURCES

Marker Manager

Wrap-Around Trousers Layplan

1/4 Scale: 37cm(width)x37cm(length)
Full Scale: 148cm(width)x148cm(length)
TEAMS & COLLABORATE ULTRA

• Regular FPC team meetings on ‘Teams’ to plan what we are going to do, but also learn how to use teams.
• Engaging in the ‘LCF Learning & Teaching Team’ with Nick Almond & Sheldon Chow – Very Helpful.
• Watch videos uploaded on Canvas.
• Attended training sessions for Collaborate Ultra with Sheldon’s team, as well as knowledge exchange within the school and course teams.
• Practice on Collaborate between us.
• Begin teaching – Trial & Error
• Have a meltdown…
BASIC LESSON STRUCTURE

- Maximum 2hrs long
- Themes of lessons we mostly manage to stick to which was on the original SOW.
- Begin with PowerPoint presentation
- Set students a task
- Software demo
EXAMPLES OF ONLINE PRACTICE: WHITEBOARD

• Was great to engage the students and aid discussion
• It was inclusive as it is anonymous – therefore we found lots of the students engaged with the use of the whiteboard to:
  ▪ Respond to questions
  ▪ Ask questions
  ▪ Draw images to aid explanation
  ▪ Give feedback.
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EXAMPLES OF ONLINE PRACTICE: TASKS

• Used to encourage active learning and ensure engagement in the techniques being delivered.
• Tasks used to embed the understanding of the submission requirements
• Examples:
  ▪ Collar workflow using Lectra functions
  ▪ Complete variant worksheets
  ▪ Complete marker manager worksheet
  ▪ Pattern pieces used for 3D simulation
  ▪ Grade plans
EXAMPLES OF ONLINE PRACTICE: BREAKOUT GROUPS

- Require a lot of planning
- Challenging to navigate and keep up students participation as it highlighted when students did not participate and there was nowhere to hide.
- A lot of support was required to facilitate the groups.
- The collar task went well and understanding was solidified.
CHALLENGES

- Knowing if the students are engaging.
- It can be difficult at times to gain student feedback.
- When sharing our screen to demo the software it must be share screen, rather than application – otherwise not all of the functionalities can be seen, due to pop up windows.
- Requiring multiple devices or support, as when demoing software we are unable to see the chat box, so we relied on technical support to let us know if any students were asking questions.
- Connection issues and having to abandon lessons.
NEW PARADIGM

• New transformed method of delivering software that allows students to engage with Lectra or other software in an alternative way.

• Inclusive of all the students whether they have access to the software or not – so they can all engage with the technology.

• This mode of delivery would never have been considered if it wasn’t for lockdown.

• Students were overall accepting of the changes and submitted good work.

“it was really helpful to think about Lectra in an alternative way and apply to our own garments which we remember more than set tasks.”
EXAMPLES OF STUDENT WORK

FPC Year 2

TECHNICAL FILE - LECTRA

Garment of choice

Open Model

Open Modans from Desktop File - Open Model - Shirt basis block

Grain Line Adj "EP"

Add grain line on each piece.

Parallel

Reduce the length of the front by 20 cm, creating a parallel line of the front and back hem.

Seam

Sew out the pieces excluding the lower area.

Measure: 3 cm down along the neck line front and back.

Draw a line from that 3 cm point to the notch along the armpit, front and back.

Notch

Place a notch along this line.

Developed

Draw the new shape of the shoulder. Draw a crossing line from the neck line point. Then a second line that will join the shoulder point and the end of the latter line. Click the tip of the triangle to make it rounded.

Straight

 Seam-out the triangle and the area close to the shoulder including the notches. Seam-out the front separately.

Tangent Arc

Seam
EXAMPLES OF STUDENT WORK

FPC Year 3

WS21SH01
Gather Blouse

- Front:
  - Step 1: Draw the front pattern.
  - Step 2: Adjust the pattern to fit the body.

- Back:
  - Step 1: Draw the back pattern.
  - Step 2: Add darts to the back pattern.

- Hemline:
  - Step 1: Draw the hemline pattern.
  - Step 2: Add gathers to the hemline pattern.

- Adding volume for gathers:
  - Step 1: Pin the gathers in place.
  - Step 2: Sew the gathers in place.

- Sketch:
  - Step 1: Sketch the final garment.
  - Step 2: Add details to the sketch.
EXAMPLES OF STUDENT WORK

FPC Final Year

I began drafting the body of the blouse starting from using the dartless woven block. To alter the shapes of the shoulders and armholes on the front, I started by simply extending the front and back block patterns by using the F3 PONDER function. I used the F3 PONDER function to define the new curve using precise anchor points, then used the F4 SWAMI function to create new pattern. I repeated the process for the back of the bodice as well.

To add the volume needed to create the Gathering for my top, I slashed and spread the front and back by adding curved lines using the F3 BEZIER function. I then used the F4 SEAM function to separate the pieces and align them along the grain, distancing them 5cm apart. I used the BEZIER tool again to draw in the new lines, and then corrected the shape by utilizing the F3 RESHAPE function.
EXAMPLES OF STUDENT WORK

FPC Final Year

Pattern construction

F1. Use the straight line tool and ruler tool to extend the width of the trousers, then sew the pattern. Do this for the front and back trouser.
THE FUTURE

• Embrace and capitalise on the discomfort of being beginners to enhance our practice.

• The new normal: teaching the software online in a virtual space

• We have gained invaluable, enduring knowledge, insights and new practice from the COVID online teaching experience.

• Keep asynchronous delivery to help mitigate problems with teaching the software online.

• Utilise tasks and resources developed for COVID in future digital pattern cutting delivery.
ANY QUESTIONS?

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