

## Reflection Note

Victoria Rowena Browne

Photopolymer Course, 2021

Grafikk, Kunst og Håndverk

The digital embodiment of a craft process requires comprehensive knowledge and experience to master a hybrid form of art production. 'Some of the operations have predetermined results whilst others depend on the care, judgement, and dexterity of the workman' (Pye 1968). In a post-digital learning situation, this requires students to assimilate a diverse range of skills, and to dedicate time for self-direction, to integrate new technology into traditional craftsmanship.

This has led me to develop an active learning situation which motivates a diversity of learners through the intersection of tacit knowledge, machine tools and digital technology; where the master guides the apprentice through a series of demonstrations in a printmaking workshop, a photomechanical darkroom, and a digital media suite.

Reflections on the third iteration of this course were informed by behaviorism, a set of principles for applying theoretical understandings to the design of learning environments; 'to cater the system of contingencies to a diverse group of students with different personal histories and with other life domains where contingencies sometimes conflict' (Moore, 2001, as cited in Kaplan & Patrick, 2016). Specifically, interest perspective is a self-determination theory (SDT) which promotes the role that environmental features play in; by triggering situational interest: maintaining situational interest: supporting the emergence of individual interest: and promoting the development of individual interest. 'Once triggered, situational interest can be maintained by environmental features such as hands-on experience in project-based activities and social interaction in cooperative tasks or one-on-one tutoring' (Hidi & Renninger, 2006, as cited in Kaplan & Patrick, 2016).

- How can the learning situation **trigger** the motivation of a diverse group of students?
- How can the learning situation **maintain** the motivation of a diverse group of students with limited access?
- How can the learning delivery **support** the emergence of individual interest at the intersection of new technology and traditional printmaking?
- What new strategies can be implemented into the learning environment to **promote** the development of individual interest?

The **trigger** to motivate students with different personal histories began with a workplan, containing the course description, links, schedule, and list of facilitators. The course was designed to motivate students with different skills in digital editing, mechanical tooling, and printmaking. The workplan was approved by the department of Art and Craft, and Technical Production, before it was uploaded onto Canvas. Students situated in the Art and Craft department, from BA2 to MA2, could choose to sign up to the course as part of the Grafikk lab at the start of the autumn semester.

## Course Description

Photopolymer is a photo-mechanical printmaking process. Originally developed in 1990 by the Danish photographer Eli Ponsaing, the technique is now more commonly known as photogravure. The process is ideal for b/w or multi-colour photographic or hand-drawn media; displaying rich continuous tones with pin sharp detail printed on archival paper. A pre-sensitised flexo plate is exposed to a hand drawn, darkroom or inkjet positive, developed in a water bath and intaglio printed on an etching press.

The two-week workshop is divided between inductions into the digital print workshop, the photographic darkroom and the photo-mechanical exposure room, with technical demonstrations in the intaglio workshop and digital editing tutorials online. Students work independently and through group activities and are welcome to repeat the workshop in their own time; to advance their knowledge and experience of photo-mechanical processes in the printmaking workshops.

Associate Professor Victoria Browne has worked with photopolymer since 2003; developing the first digital positives in the UK for Pooling, a portfolio of prints acquired by Bristol City Museum's Collection.

## Course Schedule

Uke 40, 4-8 October, 9-4pm

Mandag - Photoshop demonstration online (am) + Send files

Tirsdag – Inductions into the Digital Print Workshop Dark Room and Exposure Room (am) + Self-led activities

Onsdag – B/W printing demonstration in the workshop (am) + Self-led activities  
Torsdag – Duotone printing demonstration in the workshop (am) + Self-led activities  
Fridag - Photoshop demonstration online (am) + Send files

Uke 41, 11-15 October, 9-4pm

Mandag - Self-led activities

Tirsdag – Multi-plate printing demonstration in the workshop (am) + Self-led activities with support

Onsdag – A la poupée printing demonstration in the workshop (am) + Self-led activities with support

Torsdag - Self-led activities with support

Fridag - Self-led activities

To **maintain** the motivation of a diverse group of students, the learning situation took place in the lead up and throughout the duration of the course. Two weeks before the course began, participants were granted access to the photopolymer study notes on Canvas, containing a copy of the course description, in addition to; zoom recordings of technical demonstrations: links to instructions: links to further context: an updated course schedule: and zoom links for live digital demonstrations.

Five attendees on the course were Grafikk students ranging between BA2 and MA1. The sixth participant was an MA2 Graphic Design student. The dates were amended last minute for the course to be accommodated around Technical Production's timetable and to overcome technical

problematics from the previous year. The course began a week earlier on Thursday 30<sup>th</sup> September with an online demonstration of Adobe Photoshop software. For those students unable to attend, they could access the zoom recording in their own time to prepare. They all met the first deadline and submitted their files to the digital printshop the following day.

Access to interrelations between students and staff as a collaborative learning environment began on Monday 4<sup>th</sup> October with a visit to KHiO reception; students could only gain access with their cards to the additional workshops by visiting in person with approval of the course facilitator. Once we completed introductions for the week, together we visited Brynhild, the verksmester in the digital printshop for an induction/introduction to the digital software and machine tools required to print photopolymer positives. We compared examples of photopolymer printed proofs from the previous year and collect our positives.

The first hands-on demonstration took place in the darkroom to expose and develop monotone photopolymer positives. For those students unable to attend, and whom had previous experience with the process, they could access zoom recordings of the demonstrations in their own time to prepare. Students worked in pairs for peer support, and all met the deadline to make a photopolymer plate ready for the following day.

Further hands-on demonstrations in the intaglio workshop took place on Tuesday and Wednesday morning. Students would begin by reflecting on what they had learnt the previous day. The teaching delivery was aimed at beginners by verbally explaining and tacitly demonstrating general information about the intaglio process, with more specific information about photopolymer printing aimed at students with previous intaglio experience. Under my supervision, students repeated what they had learnt after lunch by working as a group, and the outcome of photopolymer printed proofs were mounted on the wall for further feedback. Participants could continue working into the evening, if they chose, and together were responsible for cleaning up and preparing materials for the following day. This also included students who had previously attended the course and wished to pursue photopolymer in their own time, by referring to recorded zoom demonstrations as a recap.

The course repeated the same cycle as the previous week on Thursday 7<sup>th</sup> October, with an online demonstration of Adobe Photoshop software. For those students unable to attend, they could access the zoom recording in their own time to prepare. Again, they all met the deadline and submitted their files to the Digital Printshop the following day.

The student assistant did not show up on Friday 8<sup>th</sup> October. So, I had to be on campus to double check and notify Brynhild, who had to come in on the weekend to digitally print the positives for the following week. Technical production had also decided to rearrange the digital printshop in the middle of our course, which confused how or where to find Brynhild, or if we could ask for more digitally printed positives during week two.

On Monday 11<sup>th</sup> October, I demonstrated how to expose duotone positives to be in registration on the printing press, in addition to cutting the plates and checking on the allocated material for

students to work with for the remainder of the week. They worked in pairs and met the deadline to make two photopolymer plates ready for Tuesday.

Demonstrations in the intaglio workshop for multi-plate printing took place in the mornings on Tuesday and Wednesday, for students to reflect on what they had learnt, to explain general info about colour to beginners and specifics about ink viscosity to students with experience. The students then repeated what they had learnt in the demonstration after lunch, with my supervision and the outcome of photopolymer printed proofs was mounted on the wall for feedback. At this point students spread out and required more space in the workshop, though they still worked on one press as a team; to support, observe and learn from one another.

Students were now working more independently due to their own individual timetables, but using all the paper allocated, and hours on the press allowed to complete a series of prints. They benefited from the flow and the camaraderie, and the feeling of achievement as technical knowledge was gained and combined with their own concepts in their artistic practice.

Students learnt to combine tacit knowledge in the print workshop, mechanical tools in the darkroom and digital software in the media suite. Bryhild also visited the print workshop to check in on the participants progress, enabling further reflection between students and the verksmester.

The learning delivery **supported** the emergence of individual interest, by personally addressing the access needs of each student in the lead up and for the duration of the course;

- Access for an MA1 Graphic Design student required permission from the verksmester of the intaglio workshop. This was verbally granted if the student worked only whilst I was present. An induction could not be completed for a few weeks, which also involved genuflecting the verksmester to agree, but still 'officially' limited the student's access to the workshop during the course.
- Access for a BA2 student in her second trimester of pregnancy, required one to one verbal reassurance on the health and safety of the learning environment, to develop trust and support in advance, in addition to regular breaks during the course and the ability for the student to sit down when she wanted.
- Access for an MA1 student, whose timetable often conflicted with other MAMBA commitments, required email communication to develop my trust to allow the student to participate where possible and 'catch up' by following pre-recorded demonstrations.
- Access for a BA3 student with mental health issues, required one to one supervision both verbally and by email. The student had experienced isolation and a lack of support from KHiO over the previous year due to the identity politics that had been playing out internally and in the media. She was still reticent to participate in group activities and demonstrated both disappointment and distrust of the institution prior to the course. However, as she had already participated the previous year, under limited access due to covid restrictions, she could participate in her own time by referencing the pre-recorded Zoom demonstrations and attend the group activities when she felt comfortable to do so.
- Access for another BA2 student was not an issue at the beginning of the course, but due to an unfortunate accident at home, she was temporarily unable physically engage with

printing her polymer plates in the second week and relied on the group to support her in the execution of her duotone photopolymer prints.

A new strategy was further implemented into this third iteration of the course, to **promote** the development of individual interest; in response to the motivation of the MA1 Grafikk student, who asked if he could print a CMYK multi-plate print. I had previously considered this too advanced for our students, and the limitations of the digital RIP that was used to print the photopolymer positives. But it was agreed that Grafikk would cover the additional costs for a self-led third week, and to support the access required for him to attempt a CMYK multi-plate print; by communicating with Brynhild for additional positives to be printed, offering additional materials, and permitting additional priority time in the print workshop. The outcome was a great success, as demonstrated by his enthusiasm to share the outcome with the group, on social media, as a video recording the printing process and as a verbal presentation to the participants of the Grafikk Lab at the end of the semester.

## **CONCLUSION**

The course successfully triggered and maintained the motivation of participants to complete the course. The size of the group enabled me to encompass different access needs, to support individual interests for self-led activities. This has led me to re-evaluate the students' motivation to try more advanced CMYK printing and to invite a colleague specialising in multi-plate photogravure to join us next year. In future, the learning situation will be a three-week course, to promote the development of individual interest with further specialist knowledge in the field.

I have also concluded that the ability of participants to successfully learn new knowledge is not limited by their own motivation or intellectual abilities. The quality of their learning outcome at KHIO is more likely limited by the learning situation; by the participants' financial constraints, mental and physical health issues, conflicting timetables, lack of support from technical production and the siloing of courses between departments at KHIO. For example, the oversubscribed course of twelve participants was later reduced to half due to a misinterpretation in the sign-up requirements, a conflict of last-minute commitments or a sense of loyalty to other faculty staff's courses. Grafikk students can keep up with the progress of the participants during and after the course with visual documentation on the specialism's blog <http://www.grafikk.khio.no>. But in future, I intend to engage directly with the students during the sign up with a Doodle survey, to clarify the course description with learning outcomes and visual examples to widen the participation.

## **PEER SUPPORT** with Merete Røstad

### **Tools**

- **Workplans** to prepare students expectations of their learning outcomes
- **Email** to communicate individually with students' access needs
- **Canvas** to archive multi-media teaching material including YouTube videos and links to support online
- **Zoom** recordings to support cyclical demonstrations and limited access for blended teaching
- **KHiO** access to materials, equipment, workshops and technical support
- **Microsite** to document and disseminate learning outcomes to students

### **Problematics**

- Time constraints on delivering course content
- Students' lack of preparation for the course
- External influences on the course delivery that impacts on the learning outcomes
- Interpersonal influences on the course delivery that can direct the motivation of the group
- The lack of group cohesion across faculty staff, technical production and management

### **Common Ground**

- Background as practicing artists learning on the job
- Recognition in the quality content of one another's course
- Recognition of the additional stress caused by lack of tenure
- Recognition of the limited opportunity for face-to-face peer-support
- Recognition of siloed infrastructure at KHiO

### **CHECK LIST: Access to learning situation**

The outcome of this reflective exercise also led me to construct a checklist that I intend to apply in future, in preparation of access to the learning situation for all my courses.

#### **K&H Administration**

- Access to the course workplan for A&C students to sign up.
- Access to the course facilitator for A&C students to inform sign up.
- Access to the course workplan for Technical Production to schedule.
- Access to Canvas for students' learning materials.

#### **K&H Facilitator**

- Access to new knowledge and experience: by imparting artistic research through group activities and one-to-one support in the workshop.
- Access to formal knowledge: by archiving references, reading lists, videos and weblinks on Canvas.
- Access to interrelations between students and staff as a collaborative learning environment: as group activities, presentations and dialogue for critical reflection and knowledge exchange.
- Access to participate without mental or physical constraints: with trust between students and staff, to be seen and to be heard.
- Access to participate without financial constraints: with a budget for materials, tools, and sundries.
- Access to participate without time constraints: as online, live, pre-recorded demonstrations, and priority access to workshops during the course.

#### **Technical Production**

- Access to workshops: print shop (digital printers), darkroom (exposing unit and development) and intaglio workshop (printing presses)
- Access to digital hardware: flatbed scanner, smart phone, negative scanner, photocopier, digital SLR, screenshot for capturing visual data and a computer to access digital software.
- Access to digital software: Adobe (Tools), Zoom (Communication) Canvas (Archive) and Outlook (Communication), Tumblr (Dissemination)
- Access to materials: papers and matrixes in the art store, positives in the print shop
- Access to self-led knowledge: Technical support to use equipment, tools, and sundries in the workshops

## REFLECTIVE CHECK LIST: Access to learning situation

Photopolymer Course, October 2021

**Trigger** situational interest

**Maintain** situational interest

**Support** the emergence of individual interest

**Promote** the development of individual interest

### K&H Administration

- Access to the course workplan for A&C students to sign up.
- Access to the course facilitator for A&C students to inform during sign up.
- Access to the course workplan for Technical Production to schedule.
- Access to Canvas for students' learning materials.

### K&H Facilitator

- Access to new knowledge and experience: by imparting artistic research through group activities and one-to-one support in the workshop.
- Access to formal knowledge: by archiving references, reading lists, videos and weblinks on Canvas.
- Access to interrelations between students and staff as a collaborative learning environment: as group activities, presentations and dialogue for critical reflection and knowledge exchange.
- Access to participate without mental or physical constraints: with trust between students and staff, to be seen and to be heard.
- Access to participate without financial constraints: with a budget for materials, tools, and sundries.
- Access to participate without time constraints: as online, live, pre-recorded demonstrations, and priority access to workshops during the course.

### Technical Production

- Access to workshops: print shop (digital printers), darkroom (exposing unit and development) and intaglio workshop (printing presses)
- Access to digital hardware: flatbed scanner, smart phone, negative scanner, photocopier, digital SLR, screenshot for capturing visual data and a computer to access digital software.
- Access to digital software: Adobe (Tools), Zoom (Communication) Canvas (Archive) and Outlook (Communication), Tumblr (Dissemination)
- Access to materials: papers and matrixes in the art store, positives in the print shop
- Access to self-led knowledge: Technical support to use equipment, tools, and sundries in the workshops



## PROBLEMATICS to resolve for 2022

	<b>Problem</b>	<b>Outcome</b>	<b>Solution</b>
<b>Communication</b>	The print workshop's verksmester did not receive the course workplan or schedule in advance from their management i.e., April 2021.	The facilitator had to arrange a new schedule at short notice to accommodate the verksmester's commitments which impacted on the pre-planned course schedule.	To email a copy of the workplan directly to the verksmesters in advance and CC Trond to remind him to communicate with his verksmesters.
<b>Communication</b>	The course appeared oversubscribed at the point of sign-up from the A&C admin spreadsheet, but was reduced to half by the time the course took place	The facilitator had to email students who had signed up, only to have to email all in Grafikk's to double check who else would have wanted to participate.	Doodle Survey for students to communicate their motivation directly with the facilitator at the point of sign up.
<b>Communication</b>	The Graphic Design student had not completed an induction prior to the course to access the print workshop for self-led learning.	The student could only participate on the course whilst the facilitator was present.	To email the names of students who have not completed an induction at the point of sign up to the verksmester responsible
<b>Staff</b>	The verksmester's student assistant failed to show up and print the positives for the workshop.	The facilitator came in on her day off to notify the verksmester, who in turn worked on the weekend to meet the requirements of the course.	Verksmester to be responsible for printing positives for the workshop, rather than the student assistant
<b>Materials</b>	The intaglio verksmester ran an art store for papers and matrices on the Tuesdays. This limited access to affordable materials and delayed students' self-led activities in the workshop.	The facilitator accessed the art store to give materials to students and notified the intaglio verksmester to follow up payment by the students later.	To negotiate more access to materials, both included in the cost of the course and during self-led time.

## References

- Browne, V. (2021) W(or)kmanSHIP: Transforming Reduction into tessellating multi-block relief prints. IMPACT printmaking journal, Issue 4.
- Kaplan, A. & Patrick, H. (2016) Learning Environments and Motivation. Routledge.
- Pye, D. (1968) The Nature and Art of Workmanship. Bloomsbury Publishing Inc.