PHOTOPOLYMER Course
Grafikk Lab, Kunst og Handverk

Plan of Development

The digital embodiment of a craft process requires comprehensive knowledge and experience to master a hybrid form of art production; in which 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 demands a diverse range of skills, attention, and self-motivation to integrate new technology into traditional craftsmanship.

Therefore, I wanted to develop **an active learning situation to motivate 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.

THEORY:
Learning Environments and Motivations
Avi Kaplan & Helen Patrick, 2016

Behaviourism
This provides an analytical, empirically-driven, systematic set of principles for applying theoretical understandings to the design of learning environments. One challenge, shared by other motivational theories, is **the need 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).

Self-Determination Theory (SDT) assumes that people have the natural tendency to internalize and integrate behaviours that are not intrinsically motivating to them**.** Identified and integrated motivations reflect engagement that, even if not enjoyable or interesting, involves a sense of value or importance (in the case of identified regulation) or a sense that it represents an authentic aspect of oneself. Such engagement is autonomous, is accompanied by positive emotions, and is of high quality (see further elaboration in Ryan & Deci, this volume).

Underlying assumptions of SDT holds that people **have the "inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn"** (Ryan & Deci, 2000, p. 70). This propensity is considered the core of adaptive development and personality integration and to manifest in engagement in an activity out of the sheer satisfaction of engagement itself: enjoyment, engrossment, and sense of fulfilment.

Research findings imply that learning environments that highlight different cues about opportunities and goals for engagement would be motivating to students with different motivational characteristics. More specifically, **competitive - evaluative environments suit students with high need for achievement, and collaborative individualized environments are best for students with low need for achievement.**

THEORY
Learning Environments and Motivations
Avi Kaplan & Helen Patrick, 2016

Interest Perspective
Designing motivating learning environments that promote interest involves applying research findings on the role that environmental features play in situational and individual interest.

These include environmental characteristics that :
1. trigger situational interest
2. maintain situational interest
3. support the emergence of individual interest
4. promote the development of individual interest

Bergin (1999) provided a comprehensive list of environmental features that trigger and promote situational interest, including hands - on experience, social interaction, games and puzzles. Other triggers pertain to epistemic factors, such as sense of novelty, ambiguity, or surprise. Presenting content with humour, using fantasy, in narrative form, or by modeling also seems to trigger situational interest. Certain content, such as death, danger, injury, sex, and scandal, also seems to have the propensity to pique interest (Bergin, 1999).

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). Other features that promote maintenance of situational interest are positive emotions, feedback that highlights developing competence, and relevance of the content to the self (Bergin, 1999; Hidi & Renninger, 2006).

Viewing motivational processes as complex and dynamic presents a somewhat different set of assumptions about the source, malleability, and mechanisms of change of motivational phenomena compared to those of most contemporary motivational theories.

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- 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?

Innmelding og beskrivelse av undervisningsaktivitet/LAB

Studieåret 2021/2022 Kunst og håndverk.

Tittel på undervisningsaktivitet/LAB Denne tittelen blir synlig i timeplan i Time Edit, og kalender i Canvas	Intaglio: Photopolymer

Aktiviteten/LAB inngår i følgende emne Emne (navn og kode)	Kunst og Handverk – Grafikk og Tegning

Beskrivelse av undervisningsaktivitet/LAB.

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 handdrawn, 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 will work independently and through group activities, but they are also 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 the portfolio *Pooling*, acquired by Bristol City Museum's Collection.

Material costs are included in the workshop.

Undervisningsformer F.eks. forelesninger workshops, gruppediskusjoner, etc	Workshop
Undervisningsspråk	Engelsk
Hvem skal/kan delta F.eks BA1, BA2-BA3, MA1-studenter	BA2, BA3, MA1 + MA2
Forhåndskrav Fyll inn hvis relevant	
Antall plasser Max antall studenter	12
Ansvarlige lærere	Associate Professor Victoria Browne (Scott O'Rourke, Brynhild Seim – Technical Support)
Gjestelærer Fyll inn hvis relevant	

Tidspunkt Uker, ukedager, klokkeslett LAB: kjernetid Spesifisert rombehov fylles inn i skjema under.	**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
Arbeidskrav.	Access to the *Grafikk og Tegning* Canvas Room in Høst 2020, to copy archived demonstrations and teaching files into Høst 2021.

Litteraturliste:
(informer om litteraturen er obligatorisk eller anbefalt)
Cornelia Parker, photograms
https://cristearoberts.com/artists/25-cornelia-parker/
Emma Stibbon, hand drawn positives
https://cristearoberts.com/artists/33-emma-stibbon/
Tacita Dean, digital positives
http://nielsborchjensen.com/skill/tacita-dean/

Rita Marhaug, multi-plate positives
https://www.norske-grafikere.no/tidligere-utstillinger/rita-marhaug-fol-tanken-tenk-folelsen/

Programkoordinator og studiekonsulent trenger denne informasjonen for timeplan og rombooking. Vær presis. Informasjonen vil overføres til Time Edit og studentenes Canvas-kalender.

Dato:	Klokkeslett:	Romønske / verksted:	Ev. utstyrsbehov (f.eks. projektor):
4-8.10.2021	9am-4pm	Relief and Intaglio Workshop	Intaglio Printing Presses
11-15.10.2021	9am-4pm	Relief and Intaglio Workshop	Intaglio Printing Presses
4-8.10.2021	9am-4pm	Photographic Dark Room	Sink and Safe Light
11-15.10.2021	9am-4pm	Photographic Dark Room	Sink and Safe Light
4-5.10.2021		Digital Print Workshop	Inkjet Digital Printer
8.10.2021		Digital Print Workshop	Inkjet Digital Printer
11.10.2021		Digital Print Workshop	Inkjet Digital Printer
4-8.10.2021	9am-4pm	Photo-mechanical Exposing Room	Exposing Unit / Overhead UV light

View all pages

Photopolymer Wk 40 & 41: Victoria Browne

ZOOM
Thursday 30 September @ 9.30 - 11.00

Join Zoom Meeting
https://khio-no.zoom.us/j/69127864515?pwd=ZEZsTUtPWmdldE1tWVc4cjNCUUtldz09

Meeting ID: 691 2786 4515
Passcode: 408268

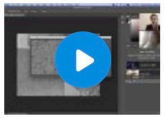
Comprehensive Instructions
https://intaglioeditions.com/procedures/polymer_photogravure.html

1. Preparing B/W Digital Files:

You will need to prepare and send a digital file by **Thursday 30th September 2021.**
Instructions to follow in Adobe Photoshop software:

1. A4 size
2. 300 dpi
3. Grayscale profile: Dot Gain 20%
4. Optional: Add an Adjustment Curve
5. Save as: student_name_photopolymer.tif
6. Send by Wetransfer to printshop@khio.no
7. Request one copy to be delivered to the exposing room

Basic Digital Editing (Channels and Profiles)



Week 40
Just to confirm we will meet on Monday at 9.30am outside the Media Lab, next to the Digital Printshop.
If you arrive earlier, check that you can access the media lab, dark rooms and exposing room with your card, or else go to reception for permission.
I will give you a tour of the facilities that we will be working with and then at 10.15. Bryhild will give a talk in the digital printshop and we can collect our positives.
Monday 4 October: Exposing & Developing
Tuesday 5 October: Printing with black
Wednesday 6 October: Printing with colour, a la poupe and duotone with one plate
Thursday 7 October: Prepare your digital file as a duotone and send to the digital Printshop
2. Exposing Photopolymer Plates

Exposing Room

Exposing Times: 35 units for Positive / 30 units for Medium Stochastic Screen

Examples of different: Raster Screens and Digital Positives.zip

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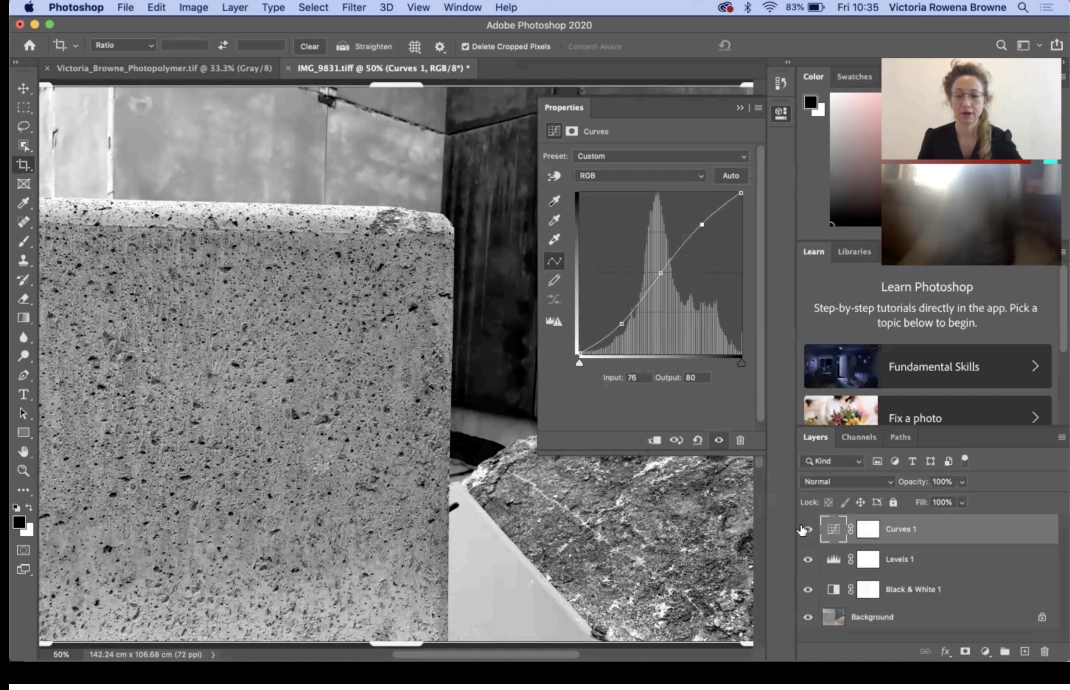
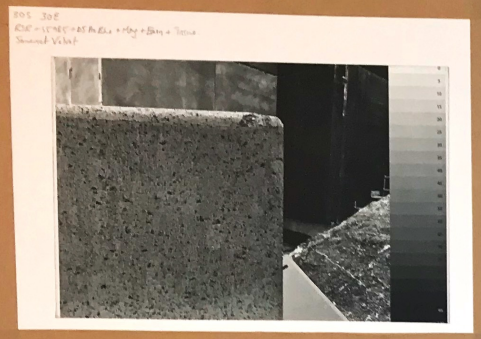
3. Developing Photopolymer Plates

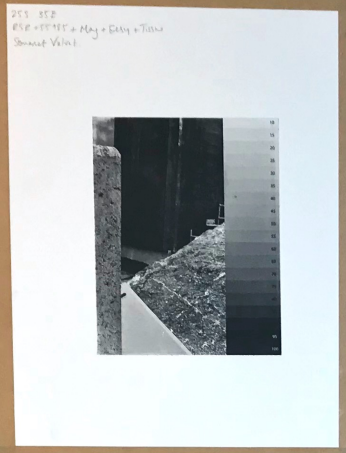
Developing Room

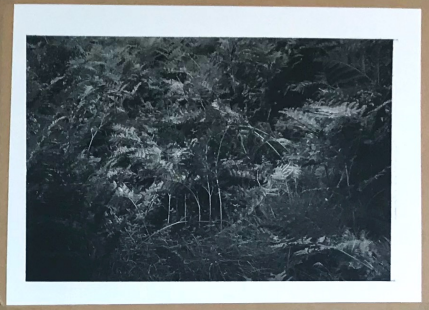
Developing Time: Water 22-24 degrees / 2 minute development (inc 30 seconds soak)

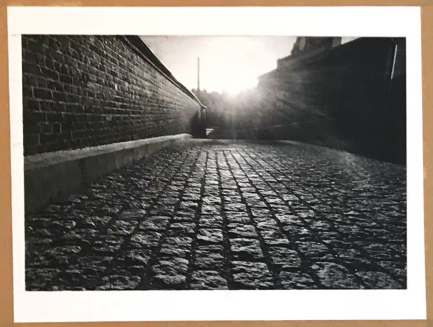

EPSON


Photoshop File Edit Image Layer Type Select Filter 3D View Window Help
Adobe Photoshop 2020
Victoria_Browne_Photopolymer.tif @ 33.3% (Gray/8)
IMG_9831.tiff @ 50% (Curves 1, RGB/8*) *
Properties
Curves
Preset: Custom
RGB
Auto
Input: 76
Output: 80
Color
Swatches
Learn
Libraries
Learn Photoshop
Step-by-step tutorials directly in the app. Pick a topic below to begin.
Fundamental Skills
Fix a photo
Layers
Channels
Paths
Curves 1
Levels 1
Black & White 1
Background
50%
142.24 cm x 106.68 cm (72 ppi)

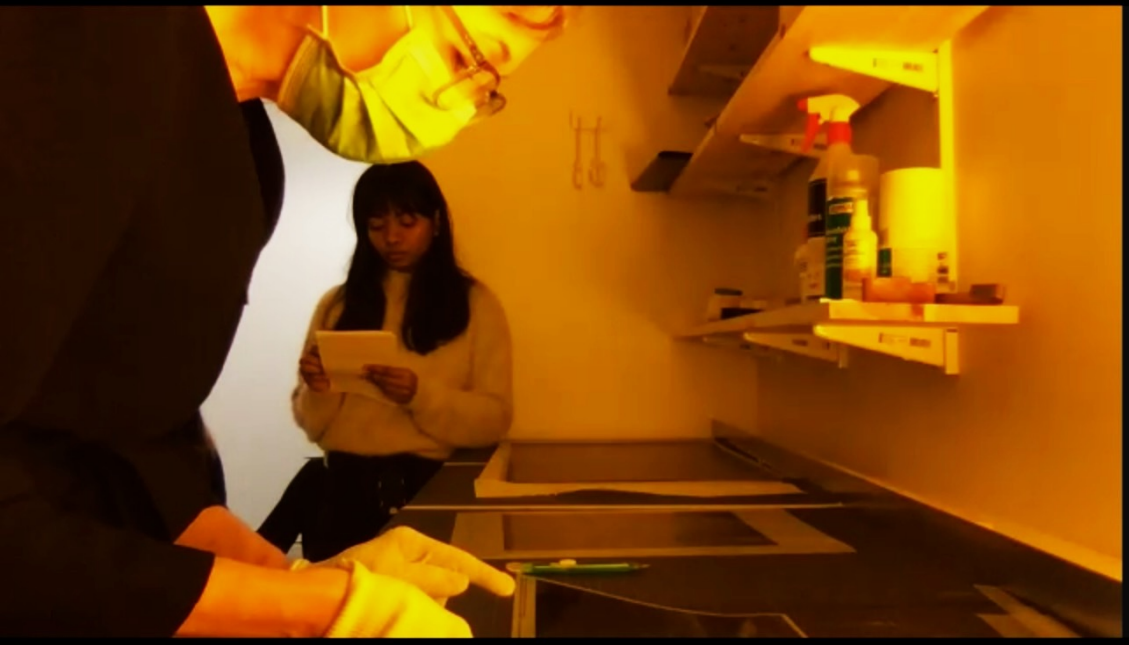


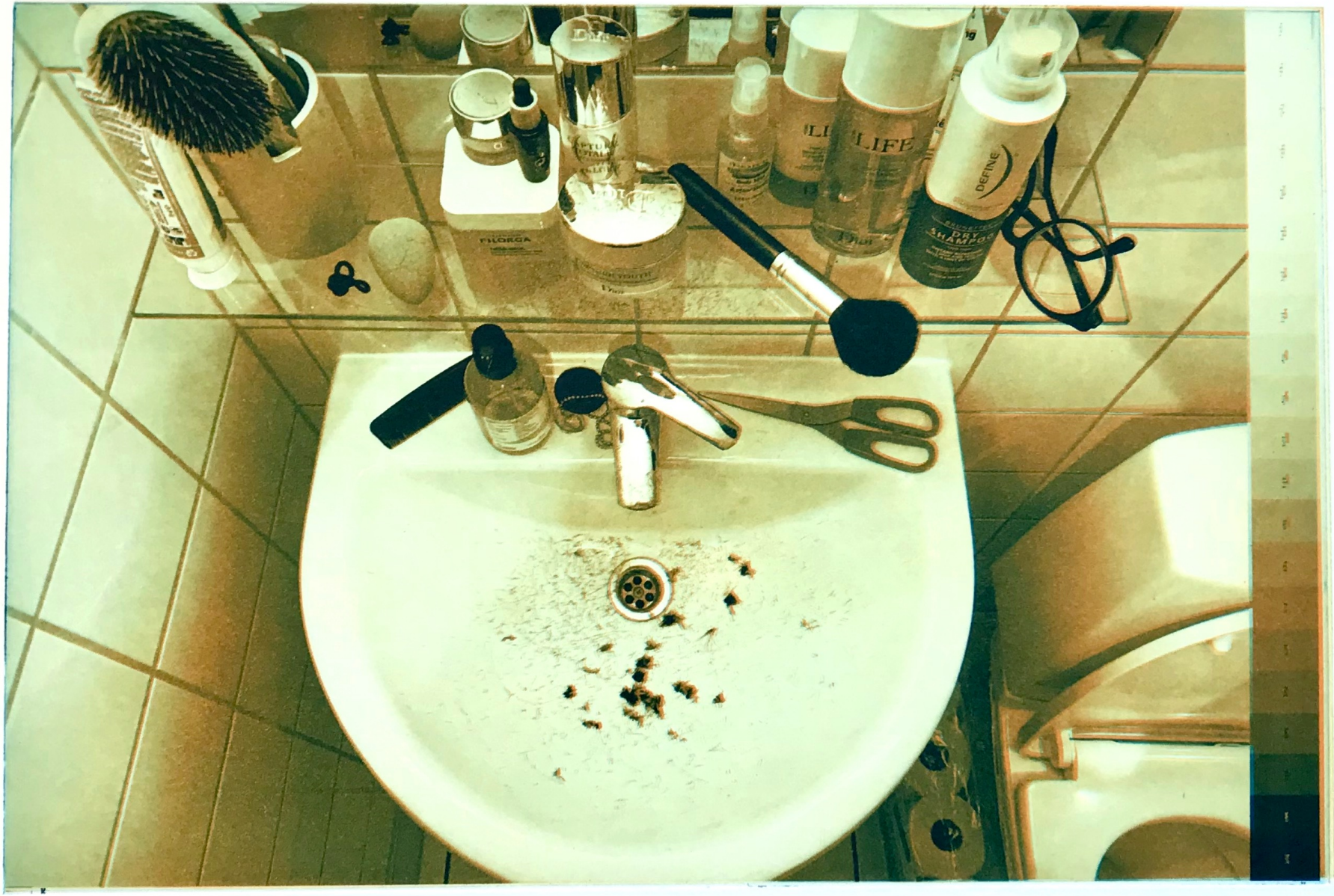


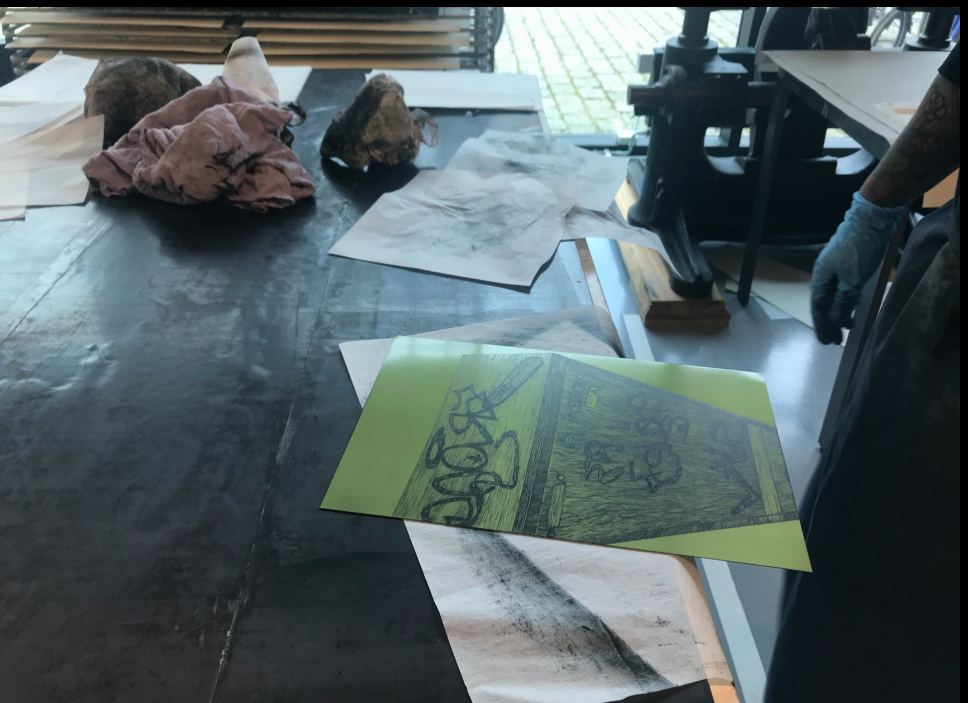


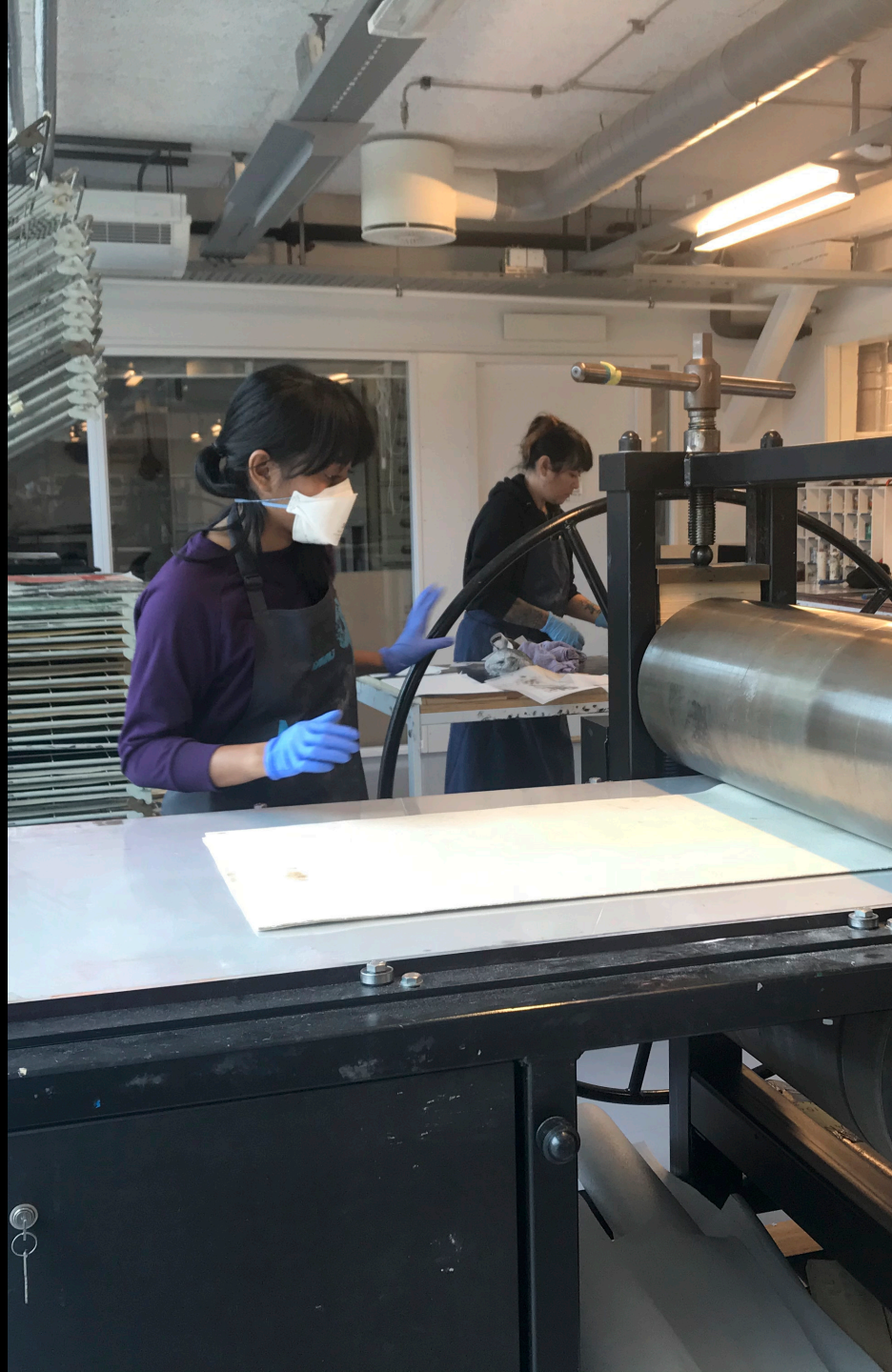



TETENAL
COLORTEC
C-41




FILORGA
DEFINE
DRY SHAMPOO





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

PHOTOPOLYMER Course
Gatekeepers: Access to learning situation

Administration
- Access to the course workplan for students to sign up.
- Access to Canvas for students' learning materials.

Technical Production
- Access to KHiO 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 self-led knowledge: Technical support to use equipment, tools and materials in the workshop

Facilitator
- Access to new knowledge and experience: by imparting artistic research through group activities and one-to-one support.
- 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: in preparation and during of the course.
- Access to participate without financial constraints: to budget for materials, equipment and sundries.
- Access to participate without time constraints: as online, live and pre-recorded demonstrations, and priority open access to KHiO workshops.