**Mediating Presence Workshop on Place, Stockholm 14-16 March**  
(Please add and edit text and links to this googledoc, it is our note-pad *before, during* and *after* the workshop. We will update it continuously during our sessions together)  
  
**Location:**   
KTH R1 Experimental Performance Space & EIT ICT Labs Presence Lab <http://www.r1.kth.se>  
Use the stairs to the lab at this address: Osquldas Väg 9  
(Our street level office is around the corner with addres Drottning Kristinas Väg 51)  
  
**Participants:**  
KTH:  
Charlie Gullström  - host and organizer: mobile: 0707153425  
Leif Handberg - host and organizer: mobile 0706566802  
Ann Lantz (not present Wednesday lunch, not Thursday morning)  
Anders S Christensson  
Jesper Olson & Joakim Lööv - Masters degree Diploma students who will help with documentation and prototyping  
  
SICS:  
Magnus Boman (probably only present on the first day, until 17.00, pretty much a vegetarian)  
  
Luleå U:  
Peter Parnes  (fish & vegetarian)  
  
TU Delft:  
Caroline Nevejan - host and organizer: mobile: +31 206383124  
Karen Lancel  
Tjerk de Greef  
Catholijn Jonker (no fish, no meat, no mushrooms, no paprika, no peppers of any kind, no cowmilkproducts, no cinnamon)  
  
Guest Experts:  
-Satinder Gill, Research Affiliate, Centre for Music and Science, Faculty of Music, University of Cambridge <http://legacy.mus.cam.ac.uk/external/research/CMS.html> (no lactose, no porc)  
-Frans Willem Korsten, Professor in  Literature, University of Leiden <http://www.eshcc.eur.nl/korsten/>  
-Rolf Hughes, Professor in Design Theory and Practice-based Research Dept. of Ceramics and Glass/The Experience Design Group/Konstfack <http://www.designingtime.se/who/>/Senior Professor in Design Research, Sint-Lucas School of Architecture, Brussels/Ghent (Rolf participates Thursday morning)  
-Charlie Stern, Glass artist <http://vimeo.com/26760133> (will partici pate Thursday until 4pm)  
-Anna Carlgren, Glass artist [www.carlgren.com/](http://www.carlgren.com/) (Anna needs to be absent a little Thursday afternoon)  
-Hermen Maat, Artist and designer <http://lancelmaat.nl/>  
  
**Aims:**  
In this workshop theoretical engagement is interwoven with rapid prototyping.   
A special focus will be given to the concept of transparency, and to the role of im/materiality in mediating presence. Invited guest speakers will contribute to this topic and discuss its relation to innovative glass craft and artistic research.  
Our four workshops in 2012 also serve to develop the BeingHere testbed: <http://www.being-here.net/page/4802/en>  
The plan, as agreed at a preparatory workshop in Eindhoven 2011, is that together we use the BeingHere testbed to write and comment on texts and ideas (both before, during and after the workshops) in such a way that new texts, ideas, presence demonstrators, applications and co-authored papers are generated throughout 2012.  
  
**Programme:**  
  
**Wednesday 14 March:**  
(e.g. 7AM flight from Amsterdam to Stockholm)  
11.30 Bag-drop at Hotel Birger Jarl (www.birgerjarl.se). 15-minute walk to KTH main campus, Charlie will meet you by reception 11.30 and accompany you)  
**12.00 Lunch in the The Presence Lab**   
Inauguration of our EIT ICT Labs experience lab : The EIT ICT Labs Presence Lab  
(Use the stairs on Osquldas väg 9, see directions by email)  
-Welcome and introductions by Charlie Gullström & Caroline Nevejan  
-The Origins of the reactor hall, by Leif Handberg  
- Short background: what is the ICT Labs Innovation Radar, by Magnus Boman  
  
**(14.15) 13.30 Talk by Caroline Nevejan: Witnessed Presence & the Being Here testbed**  
  
**(15.30) Talk by Karen Lancel: Our Social Labs and Meeting Places in Public Urban Space:**   
How to design trust and reciprocity through telepresence. Based on 20 years design practice with Hermen Maat, see  <http://www.lancelmaat.nl>

1. Agora Phopia Digitalis

2. StalkShow

3. Tele\_Trust

4. Saving Face

-Discussions  
How can you measure trust?  
  
**16.00 Talk by Franz Willem Korsten: Address of attention & Address of expression**  
6 spaces: Isolation cell, peep shop private theatre, stage, podium, podium, scaffold, arena or circus  
Political attitudes and possibilities affect each space, and their relation  
(How we allocate meaning to each space?)  
Surveillance, voyeurism, identification or reflexivity, participation, fascination or horror, exhilaration or despair. - spaces are not neutral yet universal.  
Can turn a space into a dramatization  
Speach acts, cannnot be predicted - the example produced NEW information  
  
Real spaces but also conceptual spaces, thus can travel. They involve distinct political attitudes or possibilities, ways of using them. Yet they are objective/universal in the sense that they have a mathematical component, which would make them truth. How can talk about trust if you don’t talk about truth. They lead to situations: Theatricality and dramatization (involves new information, speech acts that cannot be predicted, the jump from the virtual to the actual). Based on Plato: idea that is reflected into a thing, a reality. The idea is the virtual in Frans’ story, the thing is the actual. This virtual was there, but we didn’t know about it.  
  
Gilles Deleuze’s notion of the virtual - the virtual is the ‘new’ - jumps from the virtual to the actual  
F-W stresses this as the element of political significance  
I am suddenly in a new world - our action together will produce this new notion, by choice

architecture

stage                podium  
theatre        situation    drama  
  
  
Brecht attacked Benjamin because it was plot, narrative! Mythos!  
In order to act ourselves....we need the stage  
  
Address of attention (silence)  
Address of expression (I think he is in pain) - noise  
  
Address of expression (involves noise), address of attention (involves silence, which is not soundlessness, because the human body needs some sounds).  
Apostrophe (http://changingminds.org/techniques/language/figures\_speech/apostrophe.htm), parabasis (<http://en.wikipedia.org/wiki/Parabasis>)  
Disruptive/violent silence - Benign silence and benign sounds – disruptive sounds  
  
The podium is very different: open to all sides, gets direction only when addressed  
Here we have an address of attention and address of expression  
(PARABASIS)  
  
Noise needed! Bring the presence of the audience in....  
Facebook is conceptual noise, on the verge of violent noise.  
Presence is always also political; who is allowed to be present. Podium also serves the political agenda.  
  
To witness someone, you need awareness of the other....some kind of noise required  
  
FB becoming circus arena or the scaffold where we are beheaded?  
Scepticis in terms of Arabian Spring - FB as driver...  
  
  
Distributed podium or shared mediated stage.....  
  
Fictional presence - media-auric (von der Meuler) the only way to be present on FB  
  
Simply participating is not enough  
  
Self-witnessing/self-reflexive a crucial capacity for learning etc  
By seeing the other perspective - would you act differently  
Self-witnessing ~ reflective behaviour, Frans warns that this is probably not the same as a witness in drama.  
Political agenda: the process and choices of creating one world instead of another.  
  
How do we relate this to future actions?  
The future is the new, says F-W  
  
Witnessing, so far, gives two positions of choice: be witness or bear witness  
  
Negotiation is a podium space  
Cf. Witness and ambassador  
  
To actually construct a podium...is key  
Podium’s are rare ( and our awarenes of existing spatial qualities)  
  
  
  
  
-Discussions  
How can you have trust if you don’t speak of truth?  
Is silence and noise missing in the texts so far?  
What is participation? Being part of a  larger whole  
Are we always aware if there is a witness or not?  
Data-mining, your social profiling - can be regarded as witness?  
  
16.30 Video loop exercise and leg stretcher  
(18.00) 17.00 Talk 3: Charlie Gullström: A conceptual toolbox for Presence Design  
Description of conceptual toolbox (in Charlies PhD in the box)  
Examples. mediated spaces  
  
  
  
-Discussions  
18.00 Final discussions  
19.30 Dinner, Restaurant Buco Nero, Roslagsgatan 4 (quite near the hotel) <http://www.nerostockholm.se/nerostockholm-buconero.php>  
  
**Thursday 15th March:**  
8.15 Meet in reception, walk to tube, take tube to Telefonplan  
9.00 Workshop at Konstfack University College of Arts, Crafts and Design (on the topic of im/materiality, hosted by Professor Rolf Hughes and with contributions from glass artists Anna Carlgren and Charlie Stern.  
Detailed programme:   
Time: 9.00-12.30  
Place: Glass Workshop, Konstfack  
  
Theme: Material Matters: the im/material hinge in contemporary making practices & artistic research  
  
9.00: Welcome +   
**Opening remarks on Im/materiality in Artistic Research by Rolf Hughes, Professor of Design Theory and Practice-based Research, Konstfack:**  
  
**Im/materialism**  
The materiality of glass it self symbolizes the threshold of presence and absence, what is not here is what we look out onto  
  
Beyond representation, for example Donald Duck, John Baldessari  
  
On Dematerialization in art  
Robert Morris, framing the absence (mirror, metal mesh), e.g. a cube box that contains a recording of its own fabrication  
His Steam-pieces (1967)  
Lucy Lippard 1973, Six years; The dematerialization of the Art Object  
  
Challenging economic materialism as well as physical materialism  
  
Walter de Maria – the lightning field  
  
Mcihael Heizer’s Double Neagtive – digging out of material earth surface  
Robert Smithson’s Spiral Ghetto  
Alice Aycock, Nacny Holt – the piece is not the piece itself but what happens to it when an action is initiated  
Such as the Weather project, Olafur Eliasson at the Tate Modern  
  
Looking at vs Being in/experiencing/partaking  
  
Ai Weiwei, Carsten Höller  
Experience AND Observation  
  
Rachel Armstrong, Living Architecture, programming chemical proto-cells, to get them to attach themselves to the rottenig wood of sinking Venice, with time hardening and becoming new crystal foundations of Venice. New material form resulting from  
  
Rolf ends by recommending a visit to Skokgskyrkogården  -  cemetery park outside Stockholm where life meets death (Architects Asplund & Lewerentz)  
  
  
**9.30: Anna Carlgren (directeur, VRIJ GLAS Foundation): Glass art and/as artistic research: on starting a  glass laboratory for artists who wish to undertake artistic glass research.** [www.vrijglas.org](http://www.vrijglas.org/)  
  
The danger of the visual (in skype), quoting Rolf ‘leaves no room for the imagination”  
  
Anna’s background in Orrefors, deciding to study in the Rietveld Academy  in Amsterdam  
  
Shows furnaces built and usedby Harvey Littleton, Sigfried Walkenar at the Rietweld academy in the 1960s. His fisrts student was Åsa Brandt from Konstfack, whose teacher was Stig Lindberg who didn’t allow here to blow glass. A place was offered at the RIetveld to teach her.  
  
Important to show the furnaces – they were the reason the glass movement developed. The energy from young people, wanting to burn their own glass.  
The material: you have to know the material, work on it by yourself, flirt with it engage with it.  
  
Another Swedish glass-blowing Ulla Forssell also went to Amsterdam.  
My approach to presence  
  
Glass, in my book, is the quality of the material which produces a different effect in every new setting, every time there is a new action (ref to Frans-Willem?)  
Light passes through the material and changes every time  
  
Optical phenomena and architectural elements  
Adding glass material, or reducing, altering the thickness of glass – this is Anna’s method of work. Our brain fouls us and deceiving the brain is my challenge.  
  
A series developed for a glass producer that would attract architects to use glass in new ways  
  
Offered the studio of Konstakademien in Paris, she was asked – Are you Peinture ou Sculpture? She asked:  Je suis Verrier (but then then agrred to sculpture) In Sweden she is referenced as Konsthantverkare.  
  
How can hand-blown glass inform our mediated presence design? How can we create in-between spaces  
  
Lalique doors, Paris thickness of glass produces different effects all the time  
  
Carlgren’s institute of glass Free Glass www.Vrijglas.org is funded from glass resoration projects, where handmade Berlage- glass etc can be reproduced.  
  
10.45 Coffee break  
  
**11.00-12.00 Charlie Stern: Charlie Stern's presentation will sketch im/materiality in terms of the material culture of glass craft with reference to Småland, the industrial glass area of Sweden. This will be contrasted with the practice of 3D visualisation and designing with digital tools.** These associations will be presented as opposing forces but also as linked and layered frameworks when related to interaction design and digital fabrication. Charlie's presentation will be accompanied by a glass-making demonstration by Reino Björk, glass artist and lecturer at the Department of Ceramics and Glass, Konstfack. In this combination, the im/material hinge in contemporary making practices will be staged for participants.  
  
  
**Here is a short filmclip from yesterday’s mind-blowing glass-blowing:**  
http://youtu.be/IrJ0of\_WOUE  
This incredible and skillful demonstration of virtual and real glass-blowing took place on Thursday 15 March 2012 at Konstfack University College of Arts, Crafts and Design in Stockholm. The event was part of an international workshop on Mediating Presence, organized by EIT ICT Labs and with researchers, designers and artists from Konstfack, KTH and TU Delft.   
  
The glass-blowing session was entitled: 'the im/material hinge in contemporary making practices & artistic research'  
  
Rolf Hughes, Professor of Design Theory and Practice-based Research, Konstfack  and acting Head of the department of Ceramic and Glass, spoke on the topic of Im/materiality in Artistic Research.  
He was followed by Anna Carlgren (directeur, VRIJ GLAS Foundation): Glass art and/as artistic research: on starting a  glass laboratory for artists who wish to undertake artistic glass research. www.vrijglas.org  
  
After this, glass artist Charlie Stern's presentation sketched im/materiality in terms of the material culture of glass craft with reference to Småland, the industrial glass area of Sweden. It was contrasted with the practice of 3D visualisation and designing with digital tools.   
As seen in the filmclip, Charlie Stern's presentation was accompanied by a glass-making demonstration by Reino Björk, glass artist and lecturer at the Department of Ceramics and Glass, Konstfack. Several master students also contributed.    
  
In this combination, the im/material hinge in contemporary making practices was staged for participants.  
  
(For more on Charlie Stern, see World of No Craft  
http://vimeo.com/26760133)  
  
  
  
12.30 Tube back to Tekniska Högskolan for lunch   
13.00 Lunch in the 1930s station building ‘Östra Station’  
14.00 Two parallel prototype sessions will take place (we form two groups):  
Inspirational talk by Satinder Gill on Body Moves  
  
Inspirational filmclip by Microsoft research, Illumishare <http://youtu.be/ewmw8fUTa0Y>  
(and perhaps the Intel Labs Oasis project: <http://youtu.be/6LHdGIBSq9s>)   
**Prototype 1: "Shared negotiation space"** , chair: Charlie Gullstrom  
**Prototype 2: "Octagonal Hang-out"**, chair: Leif Handberg  
17.00 Groups share what they have produced  
18.00 Continued prototyping & Dinner (catered to us)  
22.00 Sleep  
  
**Friday 16th March:**  
9-11 Prototyping, continued.  
Demonstration of Pocket Negotiator by Catholijn Jonker  
Discussion on how a process of negotiation requires links to mediating presence  
It s potential role in large organizations, human resource management; in private life negotiation and values  
  
  
Documentation of yesterday’s two prototypes:  
Mediated Corridoes is now labeled **At the Crossroads**  
Development of Hangout/Corridor to a shared space for four parties.  
  
**Discussion of Working methods**  
Participants’ reflections from the workshop are written and posted on the testbed.  
The group agrees that we continue to actively use our testbed  
Caro checks some log-in problems and in dialogue with Peter arranges for a mailingslist/Gogle group or similar  
Do Friday meetings work? 9GMT in Google Hang-out.  
  
10.15-13 Identify next steps: framework for co-authored papers, demonstrators and applications  
  
  
Roundtable:  
Frans Willem: The group needs to continue to talk and work closely together, need to talk more about technology. What are the technologies we want to use? Are they up to date, innovative? Concept for a paper together with Peter?  
Define the concepts suitable to describe im/materiality - which no longer means a distinction: it is all material. No dichotomies.  
Use our meetings/workshops in order to develop a conceptual toolbox word-list.   
Mix talk and action, walkaround, reflection in workshops  
**What do we want to achieve with the prototyping, really ?**   
This is an issue that should be spoken about while we meet.  
Formulate 2-3 scenarios that we strive toward - what is the missing link, in certain tools etc  
For example, the Mediated sketching table can develop into very different design, depending who formulates the question (e.g. video not necessary, whiteboard, smartboard useful etc...)  
  
We are still in an exploration phase - make sure our awareness of existing technologies is spread in the group - let’s look at the next-generation conferencing tools (e.g. [WEB RTC Real Time Communication](http://www.webrtc.org/)).  
  
But keep in mind, we need enough common ground to formulate which issues we are really looking to explore.  
  
Next workshop - ideas - theme TIME in Delft most likely 17-20 June (book arrival on 17th )  
17th Afternoon: Walk to Tune Ourselves, through the Dunes (optional)  
17th Dinner all together  
18th Work  
19th Work  
20th Summing up and Departures  
  
  
13.00 Lunch and exploration of developed prototype: Shared mediated negotiation space for four parties: **The Mediated Agora**  
  
  
**Background information and references:**  
The BeingHere testbed: <http://www.being-here.net/page/4802/en>  
Your respective work areas on the testbed: <http://www.being-here.net/page/5389/en>  
  
Our Research Action Line within EIT ICT Labs: <http://eit.ictlabs.eu/action-lines/ict-mediated-human-activity/>  
  
**Peter’s toys**  
Sphero (the balls): <http://www.gosphero.com/>  
Sifteo (the cubes): <https://www.sifteo.com/>  
  
**Recent information re ICT Labs:**   
  
EIT ICT Labs is currently exhibiting at CeBIT trade show in Hannover. As Peter has pointed out,  
The EIT BubbleScreen (discussed in Eindhoven) is shown there:  
<http://www.youtube.com/watch?feature=player_embedded&v=ksfr9Q1P738>    
Mediating Presence is represented by short filmclips showing earlier presence design by Charlie & Leif, that you can also see here: <http://www.youtube.com/watch?v=6m2-Jk8qWmE>  
  
A tip from our Action Line Leader Lynda Hardman:  
This may be of interest for your activity. Specifically, writing a project for the "next steps" of your current activity.  
<http://www.itea2.org/call_procedure>  
Deadline for submission of Project Outlines    30 March 2012  
Deadline for submission of Full Project Proposals    28 September 2012  
  
The funding is a little non-standard:  
<http://www.itea2.org/funding>  
  
  
**CALL FOR ACTIVITIES 2013 - SAVE THE DATE: April 10 in Stockholm**   
The EIT ICT Labs Call for activities 2013 will follow the same process and overall   
schedule as last year.   
The call guidelines will be available by April 1st  on the EIT ICT Labs intranet accessible   
from **http://eit.ictlabs.eu.**  The actual call opens and the call content is published on May   
1st  and closes on May 31st .   
  
  
**TRENTO NODE since January – Inauguration on April 18**   
As of January 1, 2012 Trento is a fully committed Node to EIT ICT Labs bringing a strong   
Italian partnership providing significant additional power to boosting ICT Innovation in   
Europe, stated Willem Jonker in the press release issued on January 3, 2012.   
  
**EIT ICT Labs Entrepreneurial Research Day –SAVE THE DATE May 2nd**   
This inspirational event will take place in Paris but video connected to all other Co-   
location Centres. Invitations will be distributed soon, more information available from   
Dorine Hamers, dorine.hamers@ictlabs.eu.    
  
EIT ICT Labs basic info on the  
[Innovation Radar](http://eit.ictlabs.eu/business/business-catalyst-and-co-funding-model/innovation-radar/)  
Latest official slide pack:  
[PDF presentation of the Innovation Radar](https://docs.google.com/file/d/0By7JW5qEsAcFVkNWS3JNQ0hTa0NhVjVKakROcFFidw/edit)  
Your contact, for foresighting and related activities:  
Magnus Boman ([mab@sics.se](mailto:mab@sics.se))

**Reflections last day**

**Peter Parnes**

* Very creative environment.
* Agenda: more mix of hands on and presentations the first day. Perhaps immediately start with something hands on to get everyone going?

Shared negotiator

* Do we need to work more on the software side for the shared negotiator? Perhaps do a dedicated HTML5/WebRTC-based communications tool.
* Perhaps discuss this more on the next workshop?
* User interface discussions needed. What is specific for this application?
* How can we use tangible interfaces in the shared negotiator and the corridor?
* How do we work between the workshops? How can we get more interaction, both in online meetings and mail.
  + Google Group?
* We should integrate the tangible in the command control scenario (Anders).

Generic

* How can we make our prototypes more generic so we can use them “anywhere”? Or what can we take with us into a more generic setting with only our “standard” worktools with us?

Reflections Workshop Tjerk   
Interdisciplinairy group of experts that are thinking out of the box about mediating presence. Presentations were tailored to the objective of mediating presence. The setting in which you ‘play’ with technology using avaible tools helps to understand and contrbutes significantly to the lack of presence in distributed settings.  
  
Some questions and concerns. First, which situations requires mediating presence (e.g., negotiation). Second, I believe it is better to develop for a specific case or a limited number of specific cases. Third, how to develop the prototype without being being overwhelmed by code but have flexibility. Fourth, my experience with the crossroad remains confusion, at times having no idea where to look.   
  
  
Ann’s reflection  
Place has been experience in different ways e.g. the corridors, sketching tables, and, conceptually (the isolation room, the arena etc.).   
  
This is very interesting in it self but I can’t stop thinking about the activities and the people. How are theses spaces experienced due to the activity that is performed and due to the participants of the activity ? Are places adjusted in order to ”fit better” our purposes?  
  
If you think about formal meetings and for example a project meeting with information sharing – how can this activity be mediated and do any of the six concepts for place (as presented on Wednesday) fit to that?  
  
  
Satinder’s reflections  
What is the relationship between movement and touch in trusting the communication in both co-presence and mediated presence? r.e. thinking about the body veil, and the wearable billboard.  
  
What are the embodied cues for negotiation in co-presence?  Katleina’s tool helps to manage the emotional stress that comes with risk, yet risk of physical presence creates strong moral pull. Kateleina’s tool has movement if negotiation is being mediated in real time – how would this influence moral pull?  
  
Stimulating discussions on the unfolding possibilities for relationships and actions of spaces, and on the relation between praxis and representation. Would be helpful to continually develop these discussions for design strategies and understand implications for both communication and skill.   
  
Mediating glass - need to build common ground in co-presence for glass to mediate?

**Catholijn**

Reflection on this workshop.  
My main goal of this workshop was to work out how to set up the mediating presence negotiation table between two and hopefully three locations. We found several options to set up the connection for two people, the most simple consisting of having 2 laptops / ipads per side. Others, require a bit more material, such as beamers that project from the back unto a screen, camera’s hooked up through a mirror to indirectly film the people and allow for eye contact. The medium for the shared negotiation table varies from laptops/ipads with a shared sketchpad application, to smart boards, white boards, and real paper. We found out that the medium has to be adapted to what people have to do, e.g., to make a drawing together of a building or environment, dividing resources over the negotiators, or focussing on the physical aspects of showing what you think of a bid made by the other party (pushing the bid back to the other party, moving it aside, or pulling it towards you).  
The mediated cross roads experiment helped me to understand how difficult it is to understand in a three way connection, who is looking at which party directly, or indirectly. The Droste effect is interesting, but in this setting also easily confuses the attendants.  
The glass work on Thursday gave me insights on transparency and presence. Also it gave a perfect demonstration of the power of embodied vs virtual objects. It was linked nicely to the talk by Frans Willem by discussing the limits of theatricality (scaffold, podium, …) that could be attributed to the glass blower/artist and the virtual glass blower/artist.  
The workshop also gave me the first insights into the importance of architecture for presence. The connection to the work of Anders for the military related so nicely to my negotiation work, and Tjerk and my work on crisis management. Many possibility for cooperation came out of that, and I also see good opportunities to connect him to work of other people at TU Delft; Heynderickx (3D TV that can be seen from different angles without goggles), Hendriks (sign language), Broekens (AffectButton).  
Words that I am brooding on as a result of this workshop: presence, space and strategy (with respect to the podium, theatre, scaffold, private theatre, …) as discussed with Frans Willem, the importance of what you want to use the mediated space/presence for.  
  
*Prototyping for the Shared Negotiator (Peter)*   
**Step 1a:** Camera + Projector, directly connected (no network)  
- Hard to calibrate  
- Delay in the camera  
- Blocking the projector  
  
**Step 1b:** video for seeing other side  
**-** Multiuser, no Skype -> Hangout  
- Hangout, no fullscreen -> Skype + Hangout  
**-** Back projection for showing other side and then taped iPhone with Handout for video to other  side  
- Other side had laptop for seeing video  
- Need to calibrate cameras so you do not see the table  
  
**Step 2:** Electronic drawing board  
Replace the paper drawing with a shared whiteboard. Target: erase and move items  
  
**Step 2a:** Share Google Sketchpad via Hangout  
- no full screen  
- ok drawing but could be better  
  
**Step 2b:** Adobe Connect sharing/whiteboard pad  
- full screen  
- nice screen effects when moving things and erasing  
  
**Step 3:** Replace drawing paper with whiteboard  
Same as step 1b but with whiteboard instead of paper  
- we could erase  
- not fully tested as we do not have two white boards