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Understanding the ecology of the Personally Significant Learning Environment (PSLE): one year on. Presented at the
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2016

Understanding the ecology of the personally significant learning environment (PSLE): One year on

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Background

Personal learning environments (PLE) have been shown to be critical in how students negotiate, manage and experience their learning. Understandings of PLEs are largely restricted by narrow definitions that focus on technology alone. The idea of a PLE is often conflated with virtual learning environments. In this presentation, we draw on empirical findings from an international study. Our findings will be of interest to students, educators, researchers and institutions and will facilitate a more in depth understanding of how to support students to create appropriate PLEs for effectively managing their own learning.

Aims

The study aimed to provide insights into how undergraduate students of nursing manage and experience learning through a range of formal and informal components that comprise the PLE. It is a mixed-method study that incorporates two key phases. The first phase will be the focus of this presentation.

Research design

The first phase comprised a series of focus groups held at each of four institutions in Australia, England, Scotland and Hong Kong. The fifth, in Canada, was used to validate findings from the initial focus groups. Ethical approval was obtained at each individual study site. Recruitment at each site was through student emails, flyers and invitations on e-learning sites. Inclusion criteria were that students needed to be enrolled in an undergraduate degree leading to a nurse registration.

An important ethical consideration was that students understood that participation or non-participation would not impact relationships with their academic institutions or study outcomes. Nominal group techniques were used in the focus groups together with providing visual representations of their PLE in the form of a sketch or conceptual map. The themed sticky notes and visual representations were photographed and stored for subsequent analysis. Data were analyzed independently by researchers at each site. This initial analysis was at the broadest level of abstraction in order to identify main emerging categories. Investigators reached a consensus through a series of meetings through voice over IP technologies regarding commonalities and differences in the data.

Key findings

Eight groups comprising a total of 46 students participated in focus groups across the initial four sites. The findings from the focus groups generated a range of different types of data that were organized into three themes: technologies, learning modalities and influencing factors.

Technologies included physical items such as devices, computers, books, journals, newspapers, and furniture and virtual technology such as software, applications, and internet resources.

Participants said that the expected modes of learning at university did not always suit their personal learning preferences. Understanding their own learning style was important to enable an effective PLE and customising learning to suit personal preferences was seen as important.

A PLE is influenced by external, interpersonal and intrapersonal factors both individually, and by the interplay between the factors. External factors included the physical, built aspects of the environment and the learner's ambient environment.

Intrapersonal factors included attitudes, beliefs, preferences and emotions. Interpersonal factors such as how, when and where participants engaged with others also played a significant role in their PLE.

Findings suggest a broader understanding of the term personal learning environment than currently exists. PLEs are relational and comprise a space with meaning and significance to the learner.

Current definitions of PLE do not capture the broader understanding identified by this study and we therefore propose a new term: personally significant learning environment (PSLE).

Recommendations

The findings that the PSLE is significantly personal to the student's learning experience drive further research in this area.

Institutional learning platforms and modes of delivery consider the PSLE.

Key words:

- personal learning environment
- student experience
- learning environment
- qualitative research
- international study.

3 key points to indicate how your work contributes to knowledge development within the selected theme:

- student constructions of their PLE are personally significant and much broader than previously reported
- PLEs are multifactorial and complex
- PLEs need to be personally significant to be effective and as such the term personally significant learning environment is more accurate.

Personally Significant Learning Environments (PLsE)

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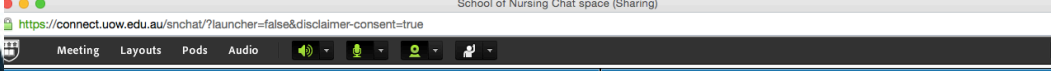
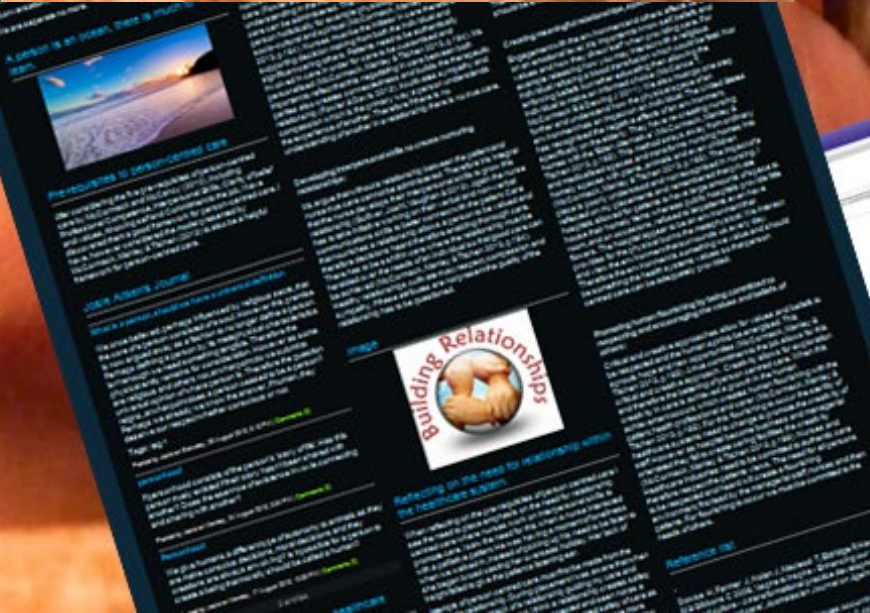
4 Dalhousie University, Canada

5 Robert Gordon University, Scotland

Outline

- An idea from personal experience
- Technology as “resources that are converted into commodities” Economics model
Technology as extensions of self
- Focus groups in 4 countries
- Early data reported last year

Personal Learning Environment



Themes for areas of learning.pdf

Themes for areas of learning... developed by students				
Group 1 (5 persons)	Group 2 (5 persons)	Group 3 (3 persons)	Group 4 (4 persons) (Students who are not in pods)	Merged themes
Technology <ul style="list-style-type: none"> Laptop Video recorder Internet Apps 	Interaction <ul style="list-style-type: none"> Quality diagrams Visual maps Discussion (internal and formal) 	Friends and classmates <ul style="list-style-type: none"> Working with people in different fields Working with people of different cultures & beliefs 	Electronic online resources <ul style="list-style-type: none"> YouTube Compass Google Internet Webinars Recording tools 	A variety of accessible online resources
Placement <ul style="list-style-type: none"> Hospital wards GP surgery Offices 	Books/journals <ul style="list-style-type: none"> Guidelines/policies Articles Websites Books Interviewer notes 	Favourable learning environment <ul style="list-style-type: none"> Classroom 	Environment <ul style="list-style-type: none"> Comfortable Discipline PowerPoints for lectures 	Opportunities to interact with others
Books/journals <ul style="list-style-type: none"> Journals Articles Podcasts Maps TV 	Library resources	Personal aspects <ul style="list-style-type: none"> Reflection Sports activities Gain myself on topic 	Evidence for learning <ul style="list-style-type: none"> Books Journal E-journals Library Newspapers 	Resources that provide evidence to support learning
Home environment	Images/videos	University support <ul style="list-style-type: none"> Tutors Student support Library experts 	Tools of <ul style="list-style-type: none"> Simulation DVD Apps Audio tapes Visual aids Blackboard (LMS) 	Practice based experience to learn from practitioners
University setting	Outgoing frameworks	Resources	Interaction	Use of a variety of visual

Chat (Zoom)

Vico Chiang: Thanks a lot
Vico Chiang: yes very delay, even the typing

Attendees: Moira Stephens, Vico Chiang, Chris, Ann Price

Hosts (4): Ann Price, Chris, Moira Stephens, Vico Chiang

Presenters (0)

Aim

- The aim of this study was to provide in-depth insights into how undergraduate students of nursing manage and experience their learning through a range of formal and informal components that comprise their PLE
- To understand what a PLE looks like for these cohorts

- This was an international multi-site qualitative study, utilizing focus groups.
- It is a sequential exploratory project that comprised two key phases of study
- An international multi-site study:
 - University of Wollongong, Australia (investigators: CP and MS);
 - The Hong Kong Polytechnic University (investigator: VC);
 - Canterbury Christ Church University, England (investigator AMP);
 - Robert Gordon University, Scotland (investigator: FW);
 - and Dalhousie University, Canada (investigator: ESG).

School of Nursing Chat space (Sharing)

edu.au/snchat/?launcher=false&disclaimer-consent=true

Layouts Pods Audio

Draw Stop Sharing Full Screen Video Stop My Webcam

Person	Group 2 (1 person)	Group 3 (1 person)	Group 4 (4 people) (this group not yet gone out to practice)	Merged themes
Person 1	Interaction <ul style="list-style-type: none"> spider diagrams mind maps discussion (Informal and formal) 	Friends and classmates <ul style="list-style-type: none"> working with people in different fields socialising with people of different cultures & beliefs 	Electronic online resources <ul style="list-style-type: none"> software computers google internet websites researching tools 	A variety of accessible online resources
Person 2	Books/resources <ul style="list-style-type: none"> guidelines/policies articles websites books literature reviews 	Favourable learning environment <ul style="list-style-type: none"> classroom 	Environment <ul style="list-style-type: none"> comfortable classroom Power Points for lectures 	Opportunities to interact with others
Person 3	Library resources	Personal aspects <ul style="list-style-type: none"> Reflection Sports activities Quiz myself on topic 	Evidence for learning <ul style="list-style-type: none"> Books Journals E-journals Library newspapers 	Resources that provide evidence to support learning
Person 4	Images/videos	University support <ul style="list-style-type: none"> Tutors Student support Library search 	'hands on' <ul style="list-style-type: none"> Simulation DVD Apps Audio tapes YouTube clips Blackboard (VLE) 	Practice based experience to learn from practitioners
Person 5	Critiquing frameworks	Resources	Interaction	Use of a variety of visual

Attendees (4)

Design

- Qualitative Approach
- Focus groups
- Semi-structured interviews
- Taped & transcribed
- Nominal group techniques
- Students themed technologies, approaches and ways of working
- Individual visual representation of PLE

Analysis

- Large quantity of data
- Thematic analysis independently by the investigator(s) of each site
- Each site then compared data and emerging findings for the development of shared analytic ideas and eventual consensual categorisation of themes

School of Nursing Chat space (Sharing)

<https://connect.uow.edu.au/snchat/?launcher=false&disclaimer-consent=true>

Meeting Layouts Pods Audio

Themes for areas of learning.pdf Draw Stop Sharing Full Screen

Video Stop My Webcam

• Themes for areas of learning - developed by students				
Group 1 (1 person)	Group 2 (1 person)	Group 3 (1 person)	Group 4 (4 people) <small>(the group has yet gone out to practice)</small>	Merged themes
Technology <ul style="list-style-type: none">LaptopVoice recorderInterestapps	Interaction <ul style="list-style-type: none">spider diagramsmind mapsdiscussion (informal and formal)	Friends and classmates <ul style="list-style-type: none">working with people in different fieldssocialising with people of different cultures & beliefs	Electronic online resources <ul style="list-style-type: none">softwarecomputersgoogleinternetwebsitesresearching tools	A variety of accessible online resources
Placements <ul style="list-style-type: none">hospital wardsGP surgeryclinics	Books/resources <ul style="list-style-type: none">guidelines/policiesarticleswebsitesbooksliterature reviews	Favourable learning environment <ul style="list-style-type: none">classroom	Environment <ul style="list-style-type: none">comfortable classroomPowerPoints for lectures	Opportunities to interact with others
Books/resources <ul style="list-style-type: none">journalsdiariesmemosfilmsTV	Library resources	Personal aspects <ul style="list-style-type: none">ReflectionSports activitiesQuiz myself on topic	Evidence for learning <ul style="list-style-type: none">BooksJournalsE-journalsLibrarynewspapers	Resources that provide evidence to support learning
Home environment	Images/videos	University support <ul style="list-style-type: none">TutorsStudent supportLibrary search	Hands on: <ul style="list-style-type: none">SimulationDVDAppsAudio tapesYouTube clipsBlackboard (V.I.E)	Practice based experience to learn from practitioners
University setting	Critiquing frameworks	Resources	Interaction	Use of a variety of visual

Chris

Maira Stephens

Ann Price

Vico Chiang

Attendees (+)

Maira Stephens, Vico Chiang, Chris, Ann Price

Hosts (4)

- Ann Price
- Chris
- Maira Stephens
- Vico Chiang

Presenters (0)

Chat (Everyone)

Vico Chiang: Thanks a lot

Vico Chiang: yes very delay, even the typing

Findings

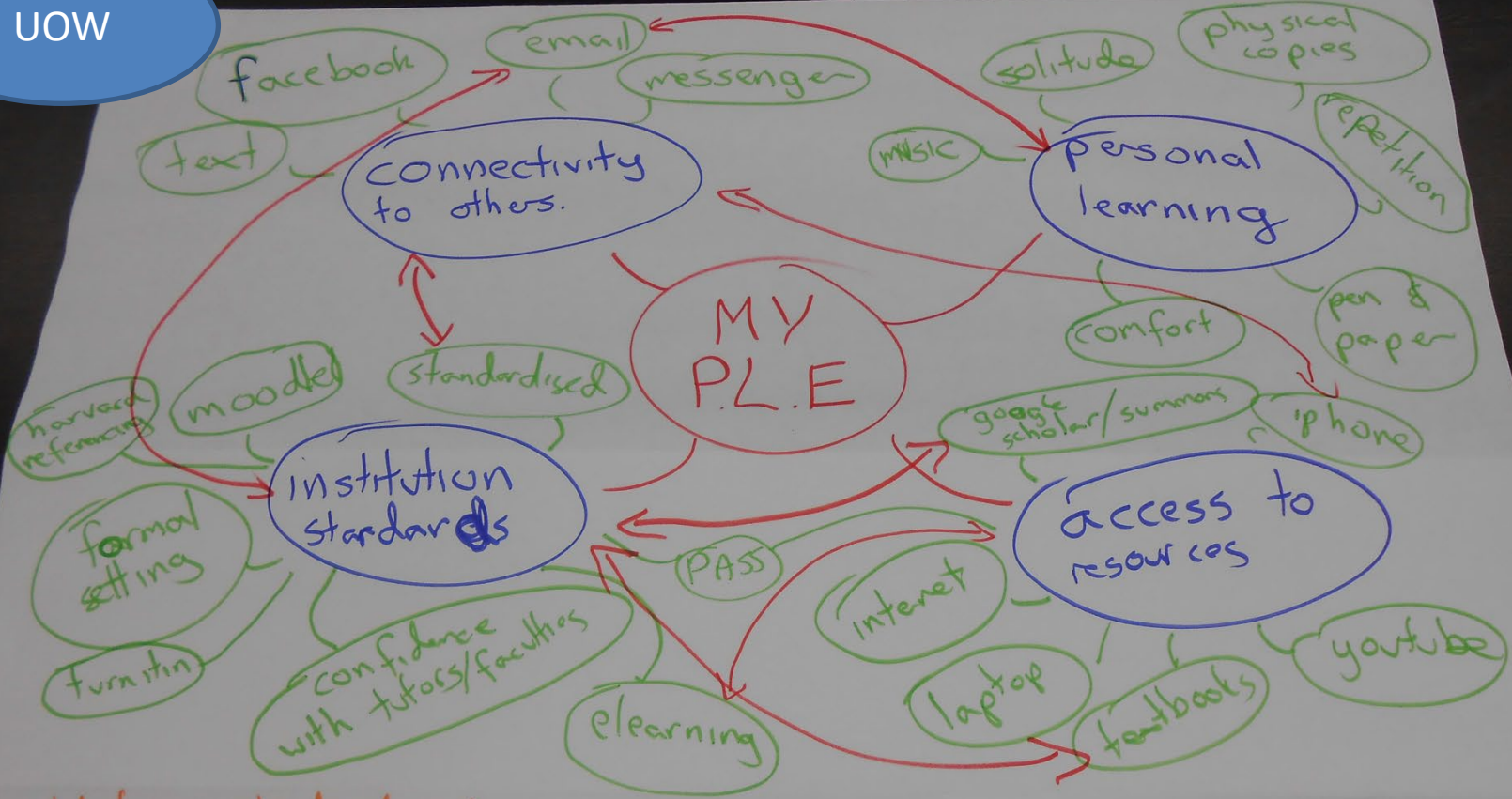


What do you understand by the term – Personal Learning Environment?

- *“you yourself, how do you learn” (CCCU 3)*
- *“I think this term [PLE] also means some personal habits, that’s about learning. When doing revision, some people like to listening to music when reading, or doing revision. So that’s apart from the physical environment, it can possibly be the own preference for what the environment is, personal habits, and the way he/she likes it. That’s about many things that work together.” (HKPU 1)*
- *“Coke, Pringles... peer support...public place ...study nest Running..” (RGU)*
- *“where ever you learn best” (RGU 2)*

UOW

UOW

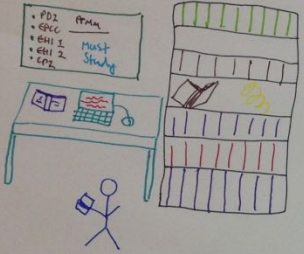


* institution standards & connectivity to others often follow social norms. *

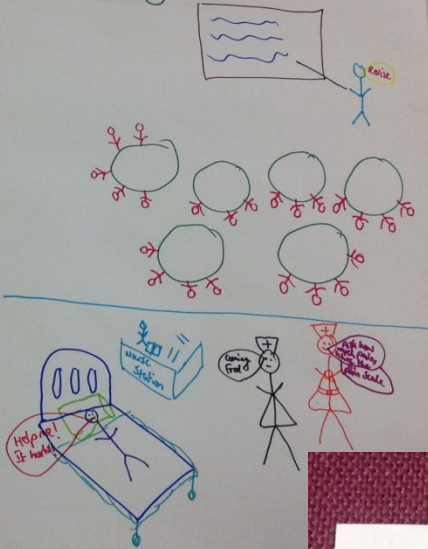
P.I.I

* personal learning & access to resources are both individualised & dictated by preference. *

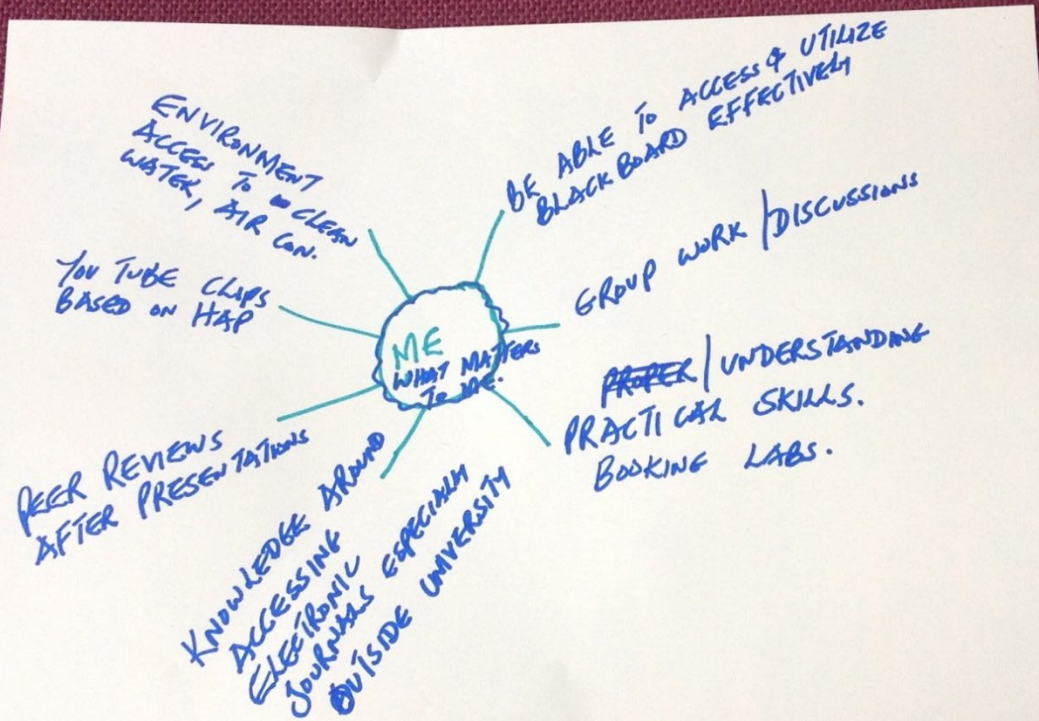
Home

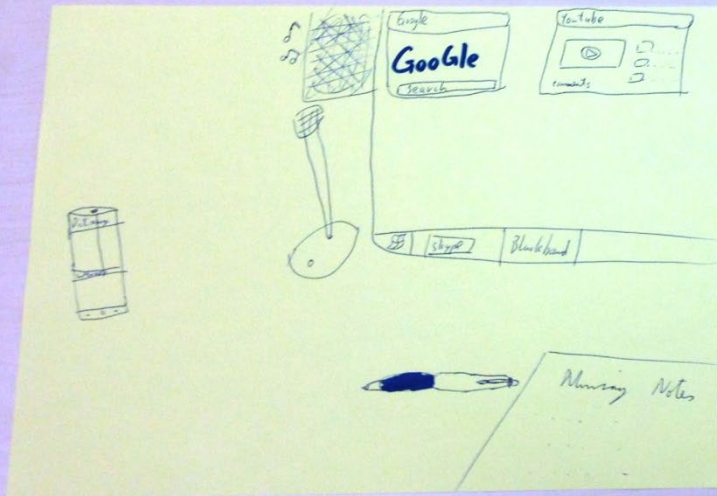
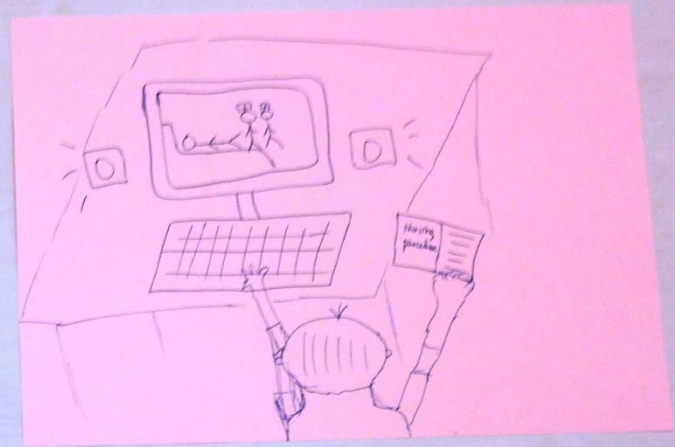
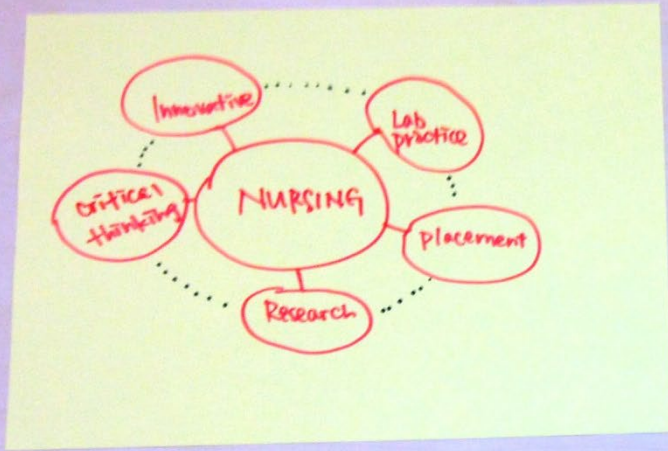


University

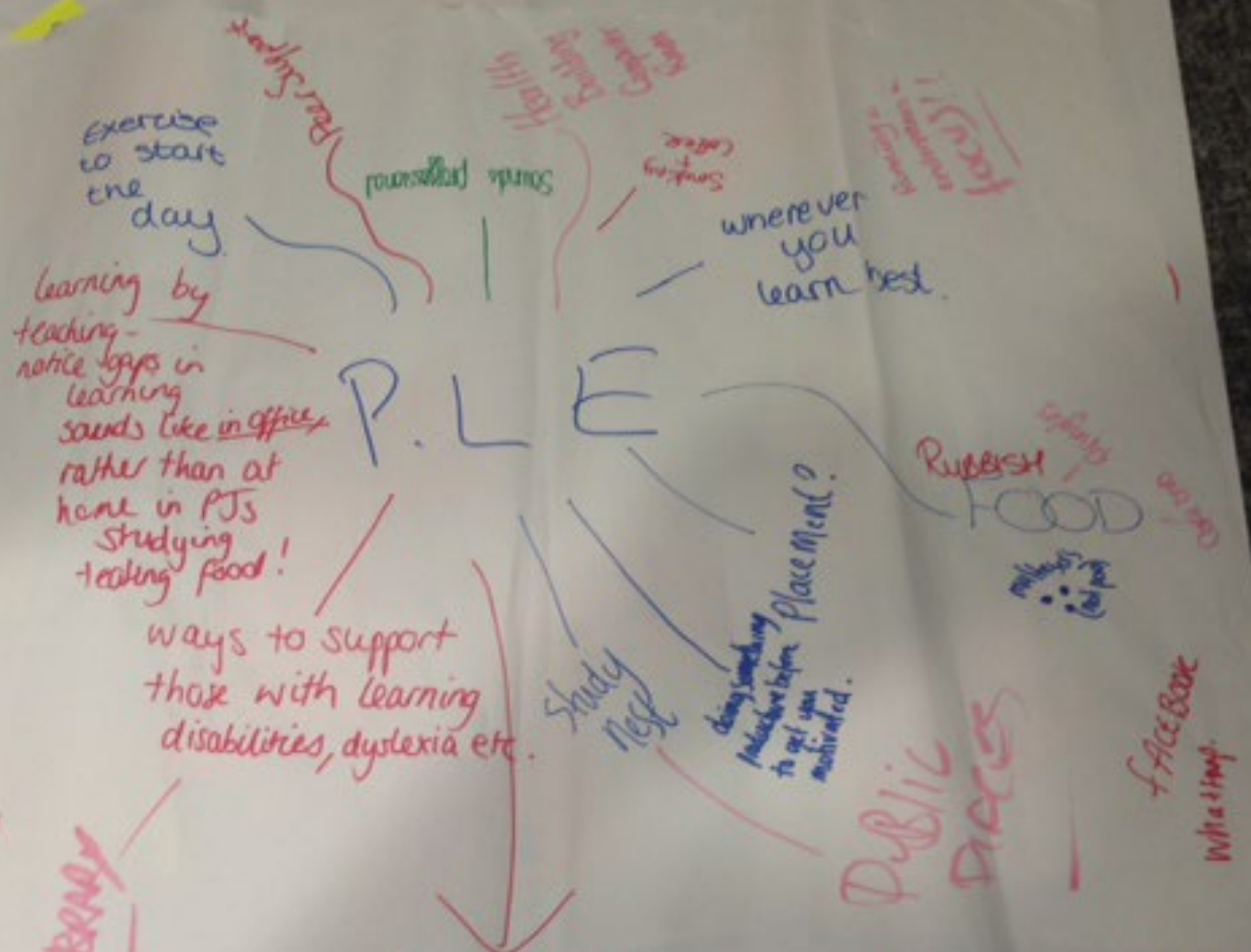


CCU





RGU



Peer Support

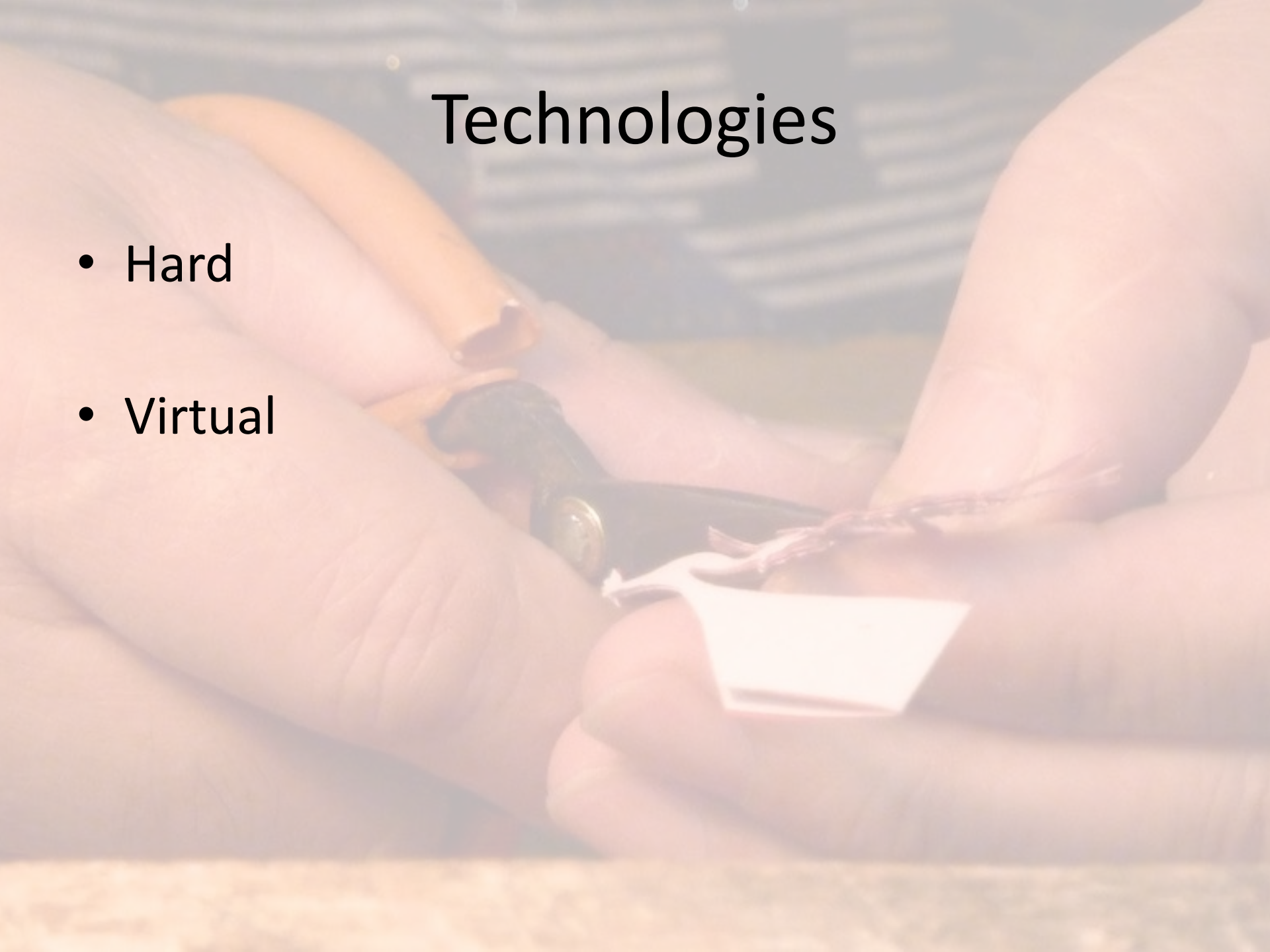
Liberty

RHYMES TO REMEMBER

Key Themes

- Technologies
- Learning Modalities
- Influencing Factors

Technologies

A close-up photograph of a person's hands holding a small, white, rectangular tag with a string attached. The tag is held between the thumb and index finger of the right hand, while the left hand holds the string. The background is a blurred image of a person's legs wearing light-colored shorts, suggesting an outdoor setting. The overall image has a soft, slightly faded appearance.

- Hard
- Virtual

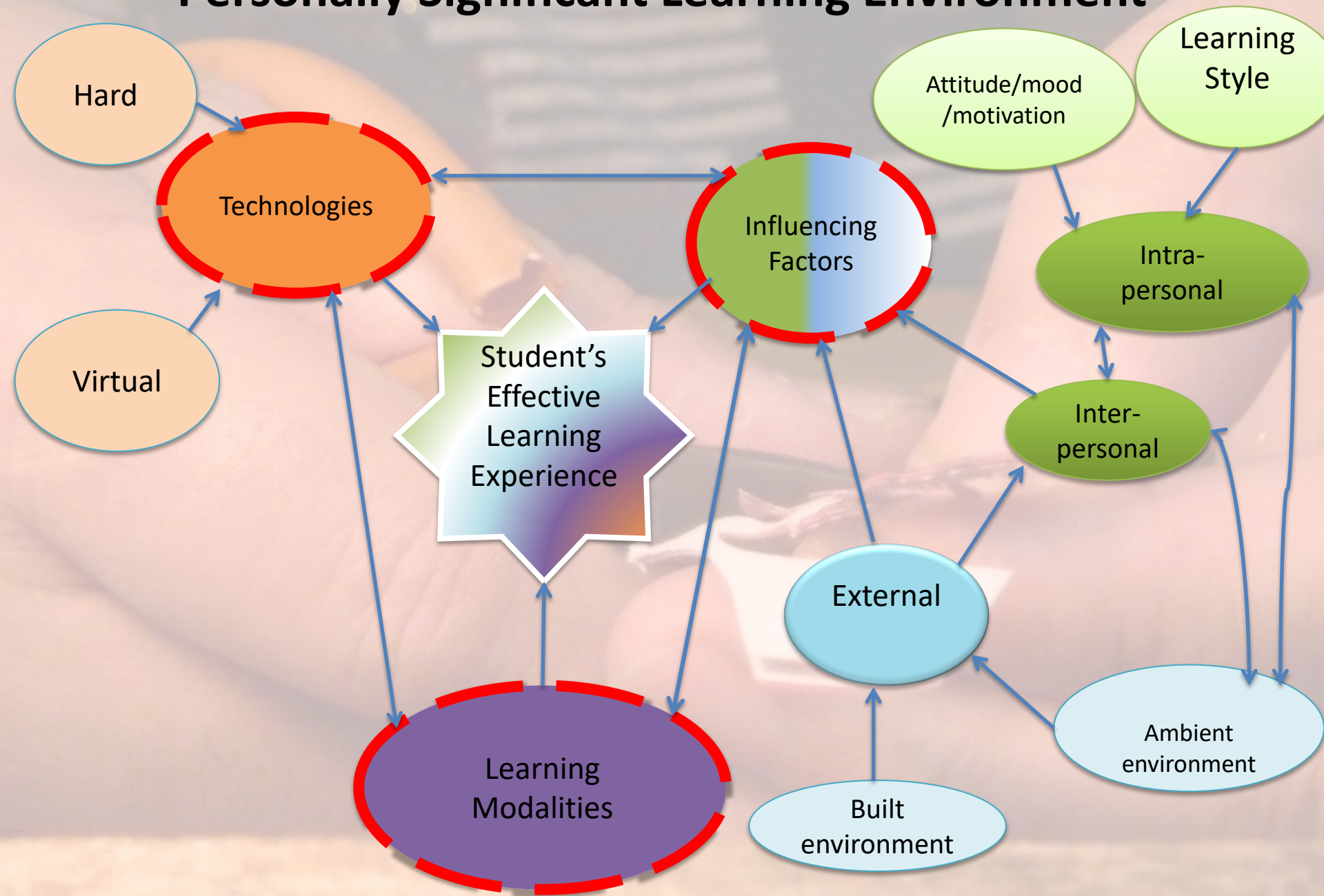
Learning Modalities

- *“ when we are in practice we do work with our mentors and other staff members so we try to ask everything”.*
- Participants identified that they experienced a range of teaching methodologies in nursing studies and described these modes of delivery as a component of their PLE

Influencing Factors

- Interpersonal factors
 - *“Sharing .. Stimulation .. You think about creativity .. So learning is just not from books ... with someone else you communicate and ... learn ...”*
- Intrapersonal factors
 - *“It’s about personal habits. Listening to music Preferences ... about how things work together {for the individual}”*
- External factors
 - *“how an area needs to be’ for the purposes of learning”*
(UOW 1)

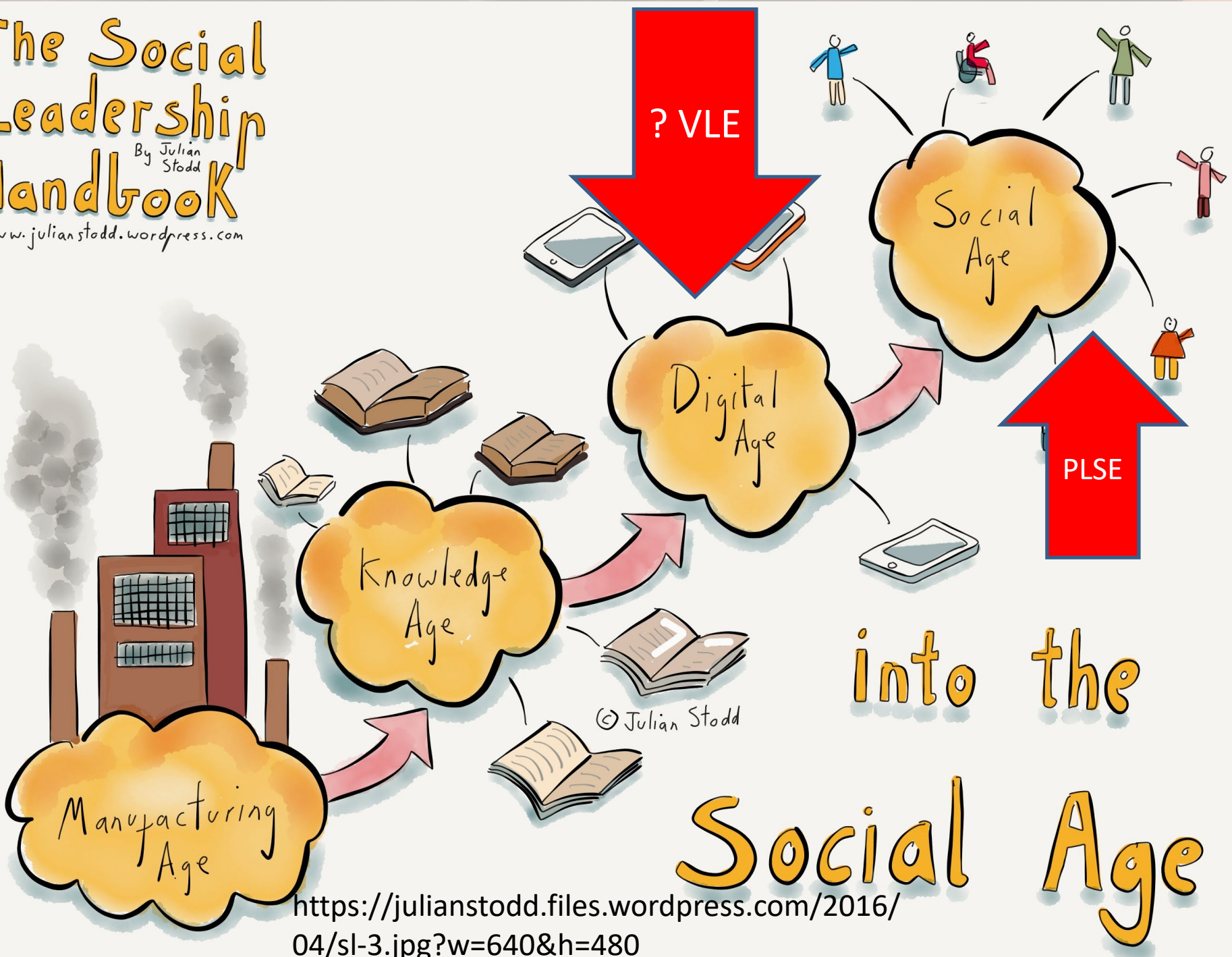
Personally Significant Learning Environment



Technology

- *“Technology is about socially collaborative conversations, about the co-creation of meaning in communities, about supporting engagement and development in these communities and about collaborating to achieve more than we ever can alone”*

Stodd 2016



Conclusion

- There are few studies that investigate PLEs at the subjective level.
- We propose a broader understanding of PLEs that acknowledges individual personal and cultural contexts which we call the personally significant learning environment (PSLE). There is a need for greater investigation of how students understand and systematize their PSLE.
- The personal learning ecology - a pedagogical understanding of the relations between individual and their environment for learning – informs the PLSE