Learning environments for medical education - a matter of space and place

Göran Lindahl
Suvi Nenonen
Agenda

• Goal of the paper

• Method

• Results

• Conclusions
First

- Health care facilities are learning facilities
- University hospitals create the identity, and thus behaviour, of future doctors and nurses and other staff
- This affects the social setting for us… the patients, colleagues etc
After all, is there a bigger challenge than to design the spaces where we shall be examined naked by medical professionals and sometimes also die?
A starting point, place, space and identity (checking out what happens at KI/Stockholm, Solna)

• A wish for a stronger identity
• The spaces are fragmented and enclaved, belonging in programs rather than place
• The homogenous student group is changing, the increased diversity among students requires meeting places, networking possibilities and symbols
• Manifestation of identity is sought for

(Walldin, 2010)
A general starting point, learning

- We always learn
- We learn everywhere
- We are spatial

- Work life is fluid, so is learner’s lives.

- Learning is a situated practice which takes place within a social and cultural system and a built environment

- Future learning environment requirements differ from “offer of the old school”
  - Hybrid curricula
  - Interprofessional interactivity
  - Flexibility
  - Collaboration/peer learning
  - Mixed modes of delivery
Goal of the paper

• This paper/presentation aims to address what constitutes a learning environment specifically for medical education
Agenda

• Goal of the paper
• Method
• Results
• Conclusions
Scoping review

• Scoping review methodology was applied in order to understand the nature of the existing literature on learning environments within medical education

• Scoping reviews represent an increasingly popular approach to reviewing health research evidence
Process of scoping review (Arksey & O'Malley’s 2005)

1. Identifying the research question
2. Identifying relevant studies
3. Study selection
4. Charting the data
5. Collating, summarizing, and reporting results
   • (6. Consultation (optional))

The process is not linear but iterative
Areas for scoping

- Medicine
  - Design of both educational and health care environments

- Education and pedagogy
Agenda

• Goal of the paper
• Method
• Results
• Conclusions
Space and place

• Learning environment can be understood in terms of *space* and *place*, wherein the physical and geographical environment is defined in terms of *space*.

• The physical space becomes a *place* when infused with abstract, value-laden associations and meanings.

(Nordquist et al., 2011; Poland, Lehoux, Holmes, & Andrews, 2005)
Space and place

Space
Abstract geometrics
Connotes geographic location and material form

Place
Connotes geographic location, material form and investment with meaning or value

Spaces and places in medical education

• Firstly, there is the traditional academic learning environment—the university—wherein medical students learn the theoretical and foundational building blocks of medicine.

• Secondly, students engage in the medical environment, namely hospitals, clinics and community settings. These seemingly ‘non-academic’ places are substantially influential places within learning.
Hospital as learning environment

• Even seemingly irrelevant environmental factors, such as the hospital’s architecture or the location of education activities, can impact medical education.

• For example, students may miss out on opportunities to learn interprofessional communication skills if the hospital is designed in such a way that the different professions interact minimally.

(Bleakley, Bligh, & Browne, 2011)
Workplace Learning

• Through the aim to integrate students in working life, students are entering the workplace at earlier phases of professional training.

• This not only teaches clinical skills and knowledge, but socializes students into the social and professional relationships in the workplace (identity).

(Bleakley, Bligh, & Browne, 201)
Identity

Institutions such as universities/hospitals rather than containing particular subjects may actually and actively create them

(Halford and Leonard, 2003)
Identity

Institutions such as universities/hospitals rather than containing particular subjects may actually and actively create them

(Halford and Leonard, 2003)

Who do you become when you are where you are?
Situated learning theory

• Emphasizes learning through participation where learning is inherently social
• Knowledge is created in a social setting

(Lave and Wenger, 1991)
Situated learning theory

• Emphasizes learning through participation where learning is inherently social
• Knowledge is created in a social setting

(Lave and Wenger, 1991)

What effects have behavior (including use of space) of future colleagues on your identity?
Agenda

• Goal of the paper

• Method

• Results

• Conclusions
So...

- What constitutes a learning environment specifically for medical education
We need to Design Place as well within learning

(e.g. Gesler, 1991 in Kearns and Joseph, 1993, Kitto, 2013)
• The relationships of power and identity in education (curriculum) and the workplace need to be considered.

• Education professions are trying to make learning more connected with practice – N.B. practice is not the truth.

• This requires closing the gap between the classroom and the workplace logics, framing etc.

• To close the gap we need to understand the principles of (re)constructing learning spaces in the workplace, which are mindful of the relationship between LEARNING, SPACE and PLACE.
Closing the gap between literature and cooking in a work life like situation!?
THERE IS MORE TO DO!

goran.lindahl@chalmers.se
suvi.nenonen@aalto.fi

THANK YOU!