Paediatric Registrar Study Day – May 2015

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Learning while working

The best of times, the worst of times?

‘It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to heaven, we were all going direct the other way - in short, the period was so far like the present period, that some of its noisiest authorities insisted on its being received, for good or for evil, in the superlative degree of comparison only.’

Charles Dickens, *A Tale of Two Cities*
Learning while working

Best of times?
- What is the value of workplace based learning in paediatric training?
- What does the workplace offer in terms of learning and development opportunities?

Worst of times?
- What are the challenges of learning in the workplace?
- What gets in the way of your learning and development at work?
Two metaphors for learning
(after Sfard 1998)

**Learning-as-acquisition**
- Learning through teaching
- Teacher-learner relations
- Vertical learning
- Acquisition of knowledge and skill as goal of learning

**Learning-as-participation**
- Learning through working
- Team relations
- Vertical & horizontal
- Full participation in work of community as goal of learning
A view of WBL

‘Learning in work-based contexts involves students having to come to terms with a dual agenda. They not only have to learn how to draw upon their formal learning and use it to interrogate workplace practices; they also have to learn how to participate within workplace activities and cultures.’

Griffiths and Guile, 1999 page 170
Curriculum for paediatric training

General paediatrics. [RCPCH 2010-15]

- Learning will take place in a variety of settings with a range of approaches (listed)

- Most events in the workplace will contribute to the learning process. Trainees are encouraged to utilise all these opportunities as well as managing their study leave to work towards completing their personal development plan.
## Paediatric Training Curriculum

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<td>- Community settings</td>
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<td>- Lecture</td>
<td>- Handover</td>
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<td>- External training courses</td>
<td>- Ward rounds</td>
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<tr>
<td>- Reflective practice</td>
<td>- Multi-disciplinary meetings</td>
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<td>- Self Directed Learning</td>
<td>- Audits and research</td>
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### Learning for work?

### Learning from work?
An ethnographic study of attending rounds in general paediatrics: understanding the ritual.


What actually occurred on attending rounds indicated a tension between what ‘should happen’ (i.e. teaching at the bedside) and a recurring confluence of contextual factors. Most often, participants talked about time-related factors that conflicted with their assumptions and helped to explain why what ‘should happen’ did not readily translate to what ‘did happen’ (…) [this] reflecting a larger tension between the clinical work of caring for patients and the educational needs of residents. One interview talked about the ‘work versus learning boundary’: (…)

The “supreme doctrine” for residents is just that you can’t let your own education in the moment supersede making sure that [the] patient gets the care they need.

p.1110-1111
Another view of WBL

How workplaces afford opportunities for learning, and how individuals elect to engage in activities and with the support and guidance provided by the workplace, is central to understanding workplaces as learning environments. (...) In particular, the workplace’s readiness to afford opportunities for individuals to engage in work activities and direct and indirect support is a key determinant of the quality of learning. These affordances are salient to the outcomes of both structured workplace learning arrangements, such as mentoring, as well as learning accessed through everyday participation at work.

Learning to observe
Learning by observing
Making learning opportunities explicit
Assessment Standard 16

An understanding of growth, development, health and well-being in paediatrics

Effective skills in the assessment and management of children and young people with normal and abnormal growth and development

Effective skills in recognising and responding effectively to disordered growth and development of any kind in paediatrics
An observation scenario

Possible ‘advance organisers’

- Comment as you can on the fine and gross motor skills of each of these children

- What features of normal and delayed language development does Alice (centre) evidence?

- How old do you think these children are – justify using observational data /milestones

Awareness of child health provision outside hospitals
Clearly the instruction ‘observe!’ is absurd. Observation is always selective. It needs a chosen object, a definite task, an interest, a point of view, a problem.

Karl Popper 1972, page 46.
An observation task…

- Identify opportunities within a ‘typical working week’ where students more typically ‘observe’ than ‘take part’

- Identify three ‘advanced organisers’ that facilitate purposeful observation, linking these to assessment standard 16
What does that suggest?

- There are different ways of looking at the same situation influenced by the professional background and experience of the observer.

- Unless a structure is given there is a risk that students either try to observe everything (at a superficial level) or observe something quite different from intended learning task.

- Observation is not an objective, theoretically neutral activity.
Assessment Standard 4

- Effective skills in three-way consultation and examination
- Responsibility for conducting effective paediatric assessments and interpreting findings appropriately
- Commitment to focussed and analytic assessment of common and complex clinical problems in paediatrics
The concept of graded responsibility for patient care in medical education is not new (...) less-experienced doctors work with senior colleagues and learn areas of medicine via the ‘observation > close supervision > remote supervision > independent practice’ route. The progression through these stages takes place in a controlled environment and under an appropriate level of supervision, guided by the supervisor’s opinion of how quickly the learner develops experience and confidence in each task, procedure or clinical presentation. The range of procedures mastered gradually expands, eventually rendering the learner an expert professional.
Scaffolding

ZAD

ZPD

ZAD

Learning
Identifying opportunities for learning while working

- Using the principles of a) graded responsibility and b) scaffolding identify ways to formally and informally develop trainees skills in paediatric consultations, examination and assessment.
Strategies

- Observation
- Bedside teaching
- Case based discussion
- Sign-posting
- Briefing and de-briefing
- Review and reflect
- Trainer think-aloud technique
- Others?
# Developing expertise

*(after Collins, 2006)*

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<th>Approach</th>
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<tr>
<td>Modeling</td>
<td>Active observation of trainer, using advanced organisers</td>
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<tr>
<td>Coaching</td>
<td>Trainer observes and facilitates trainee undertaking the task</td>
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<tr>
<td>Scaffolding</td>
<td>Trainer provides support during task, gradually removing this support over time, to move towards independence</td>
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<tr>
<td>Articulation</td>
<td>Trainer and/or trainee think aloud and/or verbalisation</td>
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<tr>
<td>Reflection</td>
<td>Trainer encourages to compare their performance with that of others /or own previously</td>
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<tr>
<td>Exploration</td>
<td>Trainer invites trainee to pose and solve their own problems /situations</td>
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Planning for on-the-job learning

- What am I doing today?
- What can the trainee do...
  - Without me?
  - With other members of the team?
  - With other trainees?
- What will be the value-added I offer the trainee today?
Learning while working

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