

**Title**: Resident Experiences of Informal Education: How Often, From Whom, About What and How

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**Journal**: Medical Education, 2014

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**Summary**:

* Background
  + Most education that takes places during work activities is informal
  + Informal learning is unconstrained by time, place, or content
  + Research Questions:
    - How often are residents taught informally by physicians and by nurses in clinical settings?
    - What competencies are informally taught to residents by physicians and nurses?
    - What teaching techniques are used by physicians and nurses to deliver informal education?
* Methodology
  + Evaluated informal education in two different settings:
    - 9-bed community-based hospice (nurse led)
    - 167-bed pediatric tertiary care teaching hospital (physician led)
  + One research assistant trained in ethnography collected 161 hours of observations.
  + Analysis used data reduction, data display, then conclusion drawing and verification.
* Results
  + 264 informal learning events: 84.4% physician-led and 15.2% nurse-led
  + 75.0% inter- and 86.1% intra-professional education happened in palliative setting
  + CanMEDS Roles most addressed were:
    - Medical Expert (nurses:27.5%; physician: 35.7%)
    - Communicator (nurses: 25.0%; physicians: 22.3%)
  + Teaching techniques used similar for both inter- and intraprofessional education.
  + 25.5% of informal interprofessional teaching were modified with indirect manner (non-confrontational).

**Discussion Questions**:

* General Thoughts
  + Liked the paper and it complements our own work that we are doing in graduate medical education
  + Mixed reactions to qualitative nature of the study; liked qualitative because it provides a lot of rich context in which to understand the informal learning events.
  + Interesting that there was not a lot of feedback as a teaching technique; would have assumed feedback is common.
  + Would be good to replicate this study in other settings and compare the findings.
  + Study is purely descriptive; it doesn’t provide the reader with implications or thoughts on what to do with the knowledge gained.
  + Nurses used lots of “hedging” teaching technique; likely because of the hierarchy between doctors and nurses?
  + Would be interesting to know the years of experience for nurses providing education; a nurse with 15 years of experience may provide more education and/or use different teaching techniques than a new nurse.
  + 15% of learning was nurse-led; shows that residents still learn from attendings (as is tradition), but this also shows there may be an opportunity for more nurse-led education.
* Potential Limitations
  + Used one research assistant to collect data: does this introduce bias or reduce problems associated with inter-rater reliability
  + Does not report anything about quality, value, or length of informal learning events. A slower pace environment such as palliative care may have better quality informal education because there is more time for discussion and reflective learning compared to a larger, faster paced teaching hospital. Perhaps interviews could fill this gap.
  + Are there any ways to tie in the patient perspective? Would this add value?
  + Does not address missed learning opportunities.
* Quality of the Paper
  + Easy to read
  + Clearly outlined and presented results for four study objectives (who, what, when, how)
  + Liked the Appendix because it provided important details and concrete examples without disrupting flow of the main results
  + Liked the study trustworthiness paragraph because it was upfront with the reader about limitations and credibility – this is very different from the engineering/math literature