Title: Purpose, pleasure, pace and contrasting perspectives: Teaching and learning in the Emergency Department

Authors:

- Dr Nancy Sadka MBBS MPH FACEM
- Dr Victor Lee MBBS MHPE FACEM – Co-Director of Emergency Medicine Training, Austin Health, Heidelberg, Victoria
- Associate Professor Anna Ryan B.App.Sc (Clin)/B.Chiro.Sc, MBBS, PhD - Director of Assessment, Melbourne Medical School, University of Melbourne
Title:
Purpose, pleasure, pace and contrasting perspectives: Teaching and learning in the Emergency Department

ABSTRACT

OBJECTIVE
Teaching and learning in the clinical setting are vital for the training and development of emergency physicians. Increasing service provision and time pressures in the Emergency Department (ED) have led to junior trainees’ perceptions of a lack of teaching and a lack of support during clinical shifts. We sought to explore the perceptions of learners and supervisors in our emergency department regarding teaching within this diverse and challenging context.

METHODS
Nine ED physicians and eight ED trainees were interviewed to explore perceptions of teaching in the Emergency Department. Clinical teaching was described as “on-the-floor” teaching during work shifts. We used a validated clinical teaching assessment instrument to help pilot and develop some of our interview questions, and data were analysed using qualitative thematic analysis.

RESULTS
We identified three major themes in our study: (1) The strong sense of purpose and the pleasure gained through teaching and learning interactions, despite both groups being unsure of each other’s engagement and enthusiasm; (2) Contrasting perspectives of teaching with registrars holding a traditional knowledge transmission view, yet shared perspectives of teacher as being ED consultants; and, (3) the effect of patient acuity and volume which both facilitated learning until a critical point of busyness beyond which service provision pressures and staffing limitations were perceived to negatively impact learning.

CONCLUSIONS

The emergency department is a complex and fluid working and learning environment. We need to develop a shared understanding of teaching and learning opportunities in the ED which helps all stakeholders move beyond learning as knowledge acquisition and sees the potential for learning from teachers of a multitude of professional backgrounds.

WORD COUNT: 267

AUTHORS

Dr Nancy Sadka MBBS MPH FACEM – Emergency Department Education and Research Lead, The Northern Hospital, Epping, Victoria
Dr Victor Lee MBBS MHPE FACEM – Co-Director of Emergency Medicine Training, Austin Health, Heidelberg, Victoria
Associate Professor Anna Ryan B.App.Sc (Clin)/B.Chiro.Sc, MBBS, PhD - Director of Assessment, Department of Medical Education, Melbourne Medical School, University of Melbourne

ORIGINAL ARTICLE

Introduction

The contemporary role of a physician encompasses a number of proficiencies. The widely recognised CanMEDS framework defines the competencies required of all physicians as:
medical expert, leader, communicator, collaborator, health advocate, professional and scholar. This framework has also been applied to describe the role of clinical teaching, which is the area of exploration in this study. By clinical teaching we mean “on-the-floor” teaching which occurs in the ward, outpatient, operating theatre, or emergency department (ED) setting, in contrast to classroom-based teaching.

Emergency physicians are considered the medical experts in the care of patients with urgent healthcare needs. Skills in professionalism, communication, and collaboration have always been fundamental in this fast paced and team-based environment, and health advocacy is enacted with every referral to an inpatient care team. Yet the role of the emergency physician is also evolving. There is increasing emphasis on the emergency physician leader role in the management of time targets and patient flow through the ED concurrent with increasing patient presentations. Excessive workload is a documented barrier to learning in medicine. Yet, the increased focus on competency-based education and workplace-based assessments highlights the importance of scholarship in this environment. This clinical teaching role is broad and is now recognised to incorporate supervising, role modelling, creating a supportive learning environment, assessing through direct observation, planning and developing resources.

The modern emergency physician in a teaching hospital must balance all these roles simultaneously: caring for patients, teaching and supervising junior trainees, managing patient flow and time targets, communicating and collaborating within the emergency team and with other hospital departments. In many instances these roles are in concert, and at other times they can appear to be in tension. While on-the-floor teaching and learning are vital for the development of emergency physicians, increasing service provision and time pressures have led to junior trainees’ perceptions of a lack of teaching and a lack of support during clinical shifts. In addition, ED work is largely shift based which creates challenges in maintaining those consistent and supportive relationships between learner and supervisor which promote constructive feedback on learning.

The emergency department is a complex and changing environment, and it is a key learning context for medical students and junior trainees, as well as being the most authentic
learning environment for future emergency physicians. As the demands on those working
within EDs continue to grow, it is imperative the education of our future physicians is not
compromised. Workplace Learning Theory suggests there is enormous potential for
learning within the workplace, and experiences, reflection and active engagement are
requisite for that potential to be realised. Clinical teaching is a key method to help guide,
support and direct learning in the ED, yet very little research has focused on exploring the
insights of the key stakeholders involved. The aim of our study was to explore learner and
supervisor perceptions of clinical teaching within this diverse and challenging context.

Study Setting
In Australia and New Zealand, emergency medicine (EM) specialty training is a five-year
program and trainees are called registrars (the equivalent of residents in the North
American medical system). Prior to entering the five-year training program, medical
students must complete an intern year (PGY-1 equivalent), a resident year (PGY-2) and a
provisional training year (PGY-3), as well as passing a set of basic sciences examinations
(primary exams). During the proceeding 4 years, EM registrars must go on to complete a
suite of workplace-based assessments plus a written fellowship examination followed by an
Objective Structured Clinical Examination before they are awarded Fellowship and become
EM consultants (or Attending physicians in the North American system). The titles of
Emergency Registrar and Emergency Consultant in Australia and New Zealand are
equivalent to the titles of Emergency Resident and Attending Physician in North America
respectively.

Methods
This was an exploratory qualitative study using semi-structured interviews. Our intent was
to reveal registrar and consultant perceptions of clinical teaching in our Emergency
Department, identify important themes, and inform future interventions to support
workplace-based learning in this environment. This research was approved by the Austin
Health institutional human research ethics committee (LNR/17/Austin/288).

The semi-structured interview (Appendix 1) was developed after initial pilot interviews with
5 ED consultants and registrars. Through a brief but focused literature search we identified a
validated clinical teaching assessment instrument (EFFECT tool) which used the theory of
workplace learning linked to the seven CanMEDS domains as a framework to assess clinical
teaching in different hospital disciplines and departments. We determined that this
framework addressed the various component parts of clinical teaching in our ED setting.
However, in order to establish the relevance of the various EFFECT tool domains to our
emergency department setting, we undertook a pilot test which confirmed that all seven
domains were applicable to our setting. After the pilot test, we determined the need for
additional questions to help us further explore clinical teaching in our ED (questions 1-5)
and the influence of context (questions 8-9) on clinical teaching. The piloted data was not
included in the final analysis. Participants were then recruited via an internal email
invitation.

Interviews with both consultants and registrars were conducted by the medical education
registrar (NS) who was in this senior ED registrar role for 12 months (i.e. the last phase of
EM training prior to being recognised as a consultant). In this stage of vocational training, NS
was considered to be a near peer in relation to both participant groups. We felt a near peer
interviewer would allow registrars and consultants to be candid in a way they might not
have been if a senior supervisor was conducting interviews. This was the registrar’s first
experience conducting qualitative interviews, but they received orientation and training
from VL and AR (experienced medical education researchers), and the first three interview
transcripts were reviewed by VL and AR for focus and accuracy. The interviewer used only
the semi-structured questions as a script and did not probe participants for further
responses.

The interviews were audiotaped, transcribed and de-identified. Qualitative thematic
analysis was used to analyse the data both deductively using the EFFECT tool framework,
and inductively by the three researchers with experience as an ED supervisor of training
and researcher (VL), ED medical education registrar (NS) and medical educator and
researcher with previous ED clinical experience (AR). NVIVO, qualitative data analysis
software, was used to code the interviews and this file was shared by all 3 researchers. The
initial coding was conducted by NS and the other two researchers (VL, AR) independently
identified themes prior to meeting to discuss and reach agreement through consensus. The
meetings were conducted after the first third, then at the end of all of the interviews. The preliminary themes were broadly divided into conceptualisations of teaching and conceptualisations of learning and two further meetings were necessary to further refine the themes and reach agreement that no new themes were identified. We eventually moved thematically from the contrasting conceptualisations to the purpose of teaching and learning itself (drawing on Workplace Learning Theory\textsuperscript{11}), and recognising that contrasting perspectives existed.

Results

This study was conducted in a major referral tertiary level emergency department in Victoria, Australia with over 85,000 attendances per year (both adult and paediatric patients). During the study period, on average there were 4 to 5 emergency physicians and 5 to 6 registrars (junior and senior trainees) per weekday shift (day or evening), as well as residents (PGY2-3) and interns (PGY-1).

Our seventeen interview participants were equally spread between emergency physicians (9) and ED registrars (8). The emergency physicians ranged in age and experience and the ED registrars included 5 early advanced (PGY-3 to 4) and 3 late advanced (PGY-5 or more) trainees in the Australasian College for Emergency Medicine (ACEM) training program.

Initially we struggled to move beyond the contrasting conceptualisations of teaching and learning perceived by our ED consultants and registrars. But through further iterative discussion, we realised that the themes staring back at us were teaching and learning itself, as well as the existence of contrasting perspectives. Added to this was our curiosity about the influence of the ED workload. Hence, our thematic analysis revealed three major themes in this study: (1) purpose and pleasure in both teaching and learning; (2) contrasting perspectives of teaching and shared perspectives of the “teacher”; and, (3) the effect of patient acuity and volume.

Purpose & Pleasure in Teaching and Learning

Both groups stated that teaching is fundamental in order to achieve the desired outcome of registrar learning.
Consultant quote: “...to add to somebody’s knowledge and make them better at what they do is the reason we are here for pretty much everything.” (Interview 16, Ref 1)

Numerous benefits of clinical teaching and learning were identified. Clinical teaching improves patient care and helps develop learner medical expertise. It allows the identification of knowledge gaps and engages participants in active relevant learning. Clinical teaching provides an opportunity for relationship building amongst the Emergency team and was referred to with a real sense of stimulation and enjoyment.

Registrar Quote: “First of all you feel really valued as a trainee. You leave your shift actually upbeat. It is exciting. You actually feel, “Wow, I have learnt something.” And it makes you enjoy Emergency Medicine...” (Interview 6, Ref 1)

It was evident that consultants want to teach, and registrars want to learn. However, consultants and registrars seemed unsure of each other’s enthusiasm and, hence were hesitant to engage with the other.

Consultant Quote: “It is really difficult to ah, trying to teach a Registrar who is not particularly interested just because it is my role to teach them” (Interview 7, Ref 2)

Registrar Quote: “...one of the negative aspects is the pressure I feel to determine when is a good time and when is not a good time to ask a question and am I being an imposition if I ask this particular consultant to give me a little bit of teaching...” (Interview 17, Ref 1)

Contrasting Perspectives of Teaching & Shared Perspectives of the “Teacher”

Consultants described teaching as opportunistic, case-based, and occurring frequently in the form of role modelling. Their descriptions of teaching were more diverse than simple one-on-one teaching. They used the example of learning through observation of clinical work
where registrars could scrutinise the consultant in their clinical role and learn how to be a consultant.

**Consultant quote:** “I think teaching and learning is happening on the floor all the time. I just don’t think we have necessarily recognised that is what we are doing and I think that is and we don’t pay enough credit to the fact that we are actually there teaching all day, every day.” (Interview 16, Ref 2)

Registrars also described teaching as opportunistic yet almost exclusively described teaching moments as involving one-on-one teaching interaction with the consultants. They provided examples of instruction, centred around a case or procedure.

**Registrar Quote:** “When there is clinical teaching it will be in the form of usually case based with a specific question from yourself to a consultant or a senior person. And they will take the opportunity to educate you around that particular clinical issue, be it a test or whatever” (Interview 11, Ref 1)

Registrars descriptions of teaching suggested they had a fairly passive role in teaching and learning exchanges, reminiscent of didactic classroom teaching encounters.

**Consultant Quote:** “I think Registrars have also got an onus too, they can’t just be spoon-fed. And be expected to learn everything about being an Emergency Physician because I am actively just teaching you stuff. You have to, you have got to get into the mindset of you want to be a good doctor, you want to be a good Emergency Physician whatever that takes.” (Interview 7, Ref 3,4)

**Registrar Quote:** “And there is occasions when just having teaching opportunity for if the Consultant has done something and they have been role modelling they can say, “Right, what do you think went well and what do you think I could have improved upon?” Would also be a valuable source of feedback in the form of well teaching…” (Interview 6, Ref 1)
Neither registrars nor consultants mentioned any other staff member as having a teaching role in the Emergency Department. Both groups focused solely on ED consultants as teachers.

**Effect of Patient Acuity and Patient Volume**
Both groups felt increasing patient acuity facilitated clinical teaching and learning.

**Consultant Quote**: “I think if you have a really unwell patient there is some really good opportunities for learning when it is high acuity” (Interview 1, ref 1)

**Registrar Quote**: “I think that sicker patients are better for clinical teaching because you are more likely to have a consultant around looking over your shoulder...”
(Interview 14, Ref 1)

Service provision pressures with increasing Emergency Department busyness were cited by both groups to decrease time available for direct interaction between the registrars and the consultants.

**Registrar Quote**: “I recognise that it is busy and I recognise okay I am going to have to step up and just see, just churn through and just be the workhorse and I don’t, things like that ... interesting discussion, I just don’t ask” (Interview 5, Ref 3)

**Consultant Quote**: “There is just ah, the time constraints, the complexity and the acuity of work um, very seldom do we really have enough time to just sit down and have a proper discussion and this is all because of the work we do.” (Interview 18, Ref 1)

Consultants emphasized teaching was still occurring despite the increased busyness of the ED but teaching and learning opportunities were being unrecognized.

**Consultant Quote**: “…there is this perception that there is no on-the-floor teaching”
(Interview 10, Ref 2)
Consultant Quote: “...there is a lot of unrecognised teaching that happens”
(Interview 12, Ref 1)

Consultant Quote: “Do they recognise that they are being taught” (Interview 4, Ref1)

Discussion
Clinical teaching is a fundamental part of the ED clinician role. Whilst juggling significant and often critical care responsibilities in a busy environment EPs are expected to support and guide learning for their more junior colleagues. Li et al\textsuperscript{12} describe three main roles of the ED clinician as teacher, assessor and patient protector which are influenced by context. We began our exploration of clinical teaching in the ED using the EFFECT tool (informed by the CanMEDS framework) which includes additional roles such as role modelling, planning and support. The problem is that perceptions of multiple clinical teaching roles combined with the ED context can result in confusion for both emergency physicians and trainees.

Understanding differing perceptions can help align teaching and learning goals in the ED educational context.

Our research explored the perceptions of clinical teaching of registrars and consultants. Our data, consistent with the wider literature on clinical supervision,\textsuperscript{13} suggest that teaching is highly valued by registrars and consultants alike. Our participant consultants recognise it as an essential component of their job, and registrars see it as a fundamental part of their development. Other work has highlighted different perspectives of ED consultants and registrars, Kilroy et al\textsuperscript{14} found that trainees were concerned about the competencies and skills of their supervisors, and EPs were concerned about the wider systemic constraints, such as protected supervisory time. We found additional contrasting perspectives, but these concerns were more focused on each other’s opinions and motivation regarding clinical teaching and learning. Our consultants felt some registrars were not keen to learn and our registrars felt that they were imposing on consultants with requests for teaching. Consistent with other work in general ward settings\textsuperscript{15} this suggests there are many missed learning opportunities in the ED environment with learning being tacit and requiring awareness from consultants and registrars.
Watling and colleagues have drawn attention to the challenge for trainees to demonstrate autonomy in their learning in contrast to efficiency in healthcare provision. They identified powerful sociocultural forces drawing learners to prioritise autonomy and efficiency. This resonates with comments from some of our registrars who felt “churning through patients and being a workhorse” was more important than learning in the ED.

It was evident that consultants and registrars had different conceptualisations of teaching in the Emergency Department. When asked about teaching, our registrar participants focused on time spent interacting with their consultants and the moments of one-on-one teaching they received. Their responses made it clear that they saw teaching in the ED to be primarily focused on transmission of information, and consistent with this they described learning as acquisition of knowledge and skills. The registrars had much less awareness of the informal learning opportunities inherent in work activities and the learning affordances daily work can offer. They did not mention opportunities for direct observation as potential learner-driven activities in the course of their daily work and, in stark contrast to modern views on workplace learning, they appeared to predominantly separate working and learning moments. Billett suggests four key principles for effective workplace learning: reflective engagement with (novel) workplace experiences, active engagement to link prior knowledge, individual meaning making and resultant change in workplace practices. This suggests a very intentional focus on learning through work (in contrast to a focus on “churning through patients”) is required for registrars to fully leverage the teaching moments and learning opportunities within the ED environment.

Recent work by Cantillon et al has examined how clinicians become teachers “on the job”. They described the tension between the identities of teacher and clinician, and how some individuals reconciled the two identities by juggling them, finding mutuality between them or forging merged identities that minimised these tensions. Our consultants hinted to these multiple identities when speaking about their various roles as teachers. While they mentioned one-on-one teaching interactions, they also spoke of the importance of role-modelling, and that this role-modelling needed to encompass the broader range of roles they undertook in the emergency department (such as management of the floor, task
allocation, patient flow, support to more junior staff). Many of these are examples of workplace participatory practices (or affordances) as described by Billet.\(^{18}\) Consultant views of teaching and learning were much more consistent with the literature on workplace learning – where teaching and learning can co-exist in a community of practice rather than merely serving individual dichotomous needs.\(^{19}\) Workplace Learning Theory\(^{11}\) would additionally suggest that consultants could more effectively teach (i.e. guide and direct registrar learning) through highlighting novel experiences, drawing on previous knowledge, supporting active engagement and exploring changed practice with registrar learners.

Registrars and consultants concurred in their views on who their teachers were. In spite of the Emergency Department being widely recognised as an exemplar multidisciplinary environment, there was an absence of any reference to learning from non-ED doctors within our data. There was no reference to being taught by or learning with or from nursing, pharmacy, physiotherapy or radiology staff, despite numerous interactions every single day. This is particularly notable given that non-ED physician staff are formally involved delivering knowledge-based content and simulation training in the registrar training program. There was also no reference made to learning from inpatient unit team members, again despite frequent interactions during every shift. The interview questions did not directly probe for learning from non-emergency hospital staff. This potentially stems from registrars’ emphasis on learning primarily through interactions with the consultant group. This focus on solo-professional learning is particularly worrisome in an environment so reliant on collaborative practice and teamwork. A change of mindset regarding learning affordances in the workplace can help learners to engage in their workplace with the purpose of seeking out learning opportunities, thus diminishing the distinction between working and learning.\(^{21}\)

Other work in general medical settings has suggested that busyness on the ward facilitates learning up to a point where opportunities for teaching and learning deteriorate as there is only a focus on direct patient care.\(^{15}\) In our study, the difference between consultant and registrar perspectives was again evident. Consultants considered service provision pressures as a hindrance to one-on-one teaching moments, however, this was not thought to be a hindrance to opportunistic workplace learning, as their conceptualisation of learning was not focused on moments of active consultant teaching. Consultants felt they had less time
to spend with the registrars on shifts due to workload demands, but they also felt the
opportunity to learn was always available during shifts despite the consultant having less
direct interaction with the registrars. In contrast registrars felt that increasing service
 provision pressures in the emergency department were decreasing their access to a
consultant during shifts, and as they privileged these teaching moments as being directly
related to their potential to learn, they felt they were not learning when the ED was very
busy.

Increasing patient acuity was seen by both groups to facilitate the interaction between
consultants and registrars and create learning moments. In particular registrars felt that
managing acutely unwell patients in the resuscitation area provided one-on-one time for
learning with, and working alongside, the consultant. The potential value of patient acuity
has also been highlighted in recent work on direct observation assessment which showed
that some emergency physicians perceived that more complex cases could be used to
challenge senior ED registrars. This suggests that emergency physicians can facilitate
learning for registrars in the midst of quite complex patient care interactions. Likewise, the
ED context, such as trainee competence, pace of the emergency department and patient
complexity, may shape the ways in which EPs negotiate their competing roles as teacher,
assessor and patient protector.

The different perspectives of consultants and registrars within our data suggest that there is
much work to be done in creating a productive educational community of practice in the
emergency department. Wenger describes communities of practice as requiring mutual
engagement, joint enterprise and shared resources. It’s clear from our work that while
both parties appeared to be engaged, there is much to be done in terms of developing
shared understandings of teaching and learning, as well as mutual ownership and agency for
workplace teaching and learning. It seems essential that registrars broaden their
understanding of teaching (beyond one-on-one knowledge transmission) so they recognise
the myriad of learning opportunities in the ED, particularly those not involving one-on-one
teaching. Consultants need to be aware of the sociocultural pressures trainees feel to
demonstrate autonomy and efficiency and can help registrars maximise learning from
patient encounters through explicit orientation to the features of the workplace learning

This article is protected by copyright. All rights reserved
and by facilitating learner engagement in this environment. All parties need to recognise the
“other” (non-ED physician) teachers and the potential for these people to contribute to
learning through work in this environment, and suggests a key role for deliberate learning
practice within the daily routines of health care providers.

We’ve already highlighted challenges ED consultants face when balancing their sometimes
competing roles in patient care delivery and supervision and support of registrars. It’s also
important to remember that registrars are not the only learners in the ED. Medical, nursing
and allied health students, and junior clinicians all learn through work in this setting.

Previous work has highlighted the importance of selection and scaffolding of learning
opportunities for learners at different levels of expertise. Recent work further builds on
this and highlights how concerns for patient safety, supporting trainee’s progressive
independence, balancing trainee competence with patient volume, and increasing trust in
senior trainees impacts on supervisory styles. Likewise, research into entrustment in the
context of inpatient wards highlights the influence of personal versus shared responsibility
(in addition to patient care and clinical teaching foci) and how this might manifest in
different supervisory styles.

Our research has shown that there is still a gap between conceptualisations of clinical
teaching from consultant and trainee perspectives. Shared understandings are recognised as
being crucial in the formation of effective communities of practice. We’ve identified
workplace learning theory and emerging supervisory models as being of particular relevance
to the ED context. We believe role modelling is a powerful clinical teaching method and that
learning from others outside of our own discipline is underutilised. Workplace based
learning theory provides a useful lens to help shift the focus towards learning from others
and highlight the potential of informal learning opportunities and of workplace affordances.
Emerging models of supervisory practice help us to understand how consultants juggle their
competing demands. These theories and models appear to have much to offer in terms of
orientating learners and teachers to the ED context.

Limitations & direction for future research

This article is protected by copyright. All rights reserved
Our study was limited by being situated in a single tertiary emergency department, but our emergency physicians and registrars had experience in other environments and referenced this in their interviews. The results may not be transferable to other EDs in Australia and New Zealand or internationally, especially with differing contexts, health systems, regulatory policies and training programs. We used an exploratory qualitative methodology which may have been biased through our experience with working in this ED. However, we used a published teaching tool assessment framework in our study design and incorporated the reflexivity of 3 researchers with different perspectives in our qualitative analysis. The scope of topics discussed in the interviews was reflected in the EFFECT tool framework and there may have been other views regarding clinical teaching in the ED beyond this tool. Participants were not further probed beyond the interview questions about their views of clinical teaching which may have explained why they did not consider other non-medical health professionals working alongside them.

We’ve referenced Billett’s key principles of workplace learning\textsuperscript{11} and emerging models of supervision in order to help understand our results. This work provides important guidance for future interventional research. A focus on one of more of these four key principles: on reflective engagement with (novel) workplace experiences, active engagement linking prior knowledge, individual meaning making and resultant change in workplace practices would be an ideal target for future ED based research. In addition, interventional research which explicitly identifies other members of the ED environment as potential teachers and links this to learner engagement and satisfaction would further contribute to our understanding of this important area.

**Conclusions**

Our study explored consultant and registrar perceptions of clinical teaching in the emergency department. Although both groups saw the value of teaching in this environment and expressed enthusiasm for the process, they were unaware of this shared view. Consultants had a broader view of teaching, more consistent with the views of teaching described in modern workplace-based learning. Registrars saw learning as a direct result of teaching interactions with consultants, thus limiting their recognition of non-didactic learning opportunities. Also, collaborative learning from many non-emergency
department staff (medical, surgical and other health professionals) was not mentioned. Patient acuity was seen by both as a facilitator of learning, and busyness was seen as facilitator until a critical point was reached where there could only be a focus on patient care. The emergency department is a complex and fluid working and learning environment. We need to develop a shared understanding of learning opportunities in the ED which moves beyond learning as knowledge acquisition to include learning through working, effective role modelling and deliberate practice, and sees the potential for teachers from a multitude of professional backgrounds.

**Word count: 4506**

**References**

5. What is emergency medicine? [Internet]. [cited 2019 Mar 4];Available from: https://acem.org.au/Content-Sources/About/What-is-emergency-medicine


## APPENDIX 1. Interview questions:

1. What kind of clinical (or on-the-floor) teaching occurs in this emergency department?
2. In your opinion, is there effective registrar clinical teaching during shifts in this emergency department?
3. What are the positive aspects of clinical teaching during shifts?
4. What are the negative aspects of clinical teaching during shifts?
5. What can be improved to facilitate clinical teaching during shifts?
6. In your opinion, in which of the following domains does this department perform well: role modelling, task allocation, planning, feedback, teaching methodology, assessment, and personal support?
7. In your opinion, in which of the above domains can clinical teaching be improved?
8. Do you think patient volume influences clinical teaching, and how?
9. Do you think patient acuity influences clinical teaching, and how?
10. Do you think having an observer present and a questionnaire to fill out will have an influence on clinical teaching during the shift?
11. Any other comments regarding clinical teaching in the emergency department?
Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:
Sadka, N; Lee, V; Ryan, A

Title:
Purpose, Pleasure, Pace and Contrasting Perspectives: Teaching and Learning in the Emergency Department

Date:
2021-04-01

Citation:

Persistent Link:
http://hdl.handle.net/11343/297998