

Developing a Workplace-Based Learning Culture in the NHS: Aspirations and Challenges

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ABSTRACT

BACKGROUND: The delivery of patient care in the United Kingdom is under increasing financial pressure. The need to continuously improve service delivery while making financial savings is challenging. Alongside this, National Health Service (NHS) Trusts must provide a suitable educational environment that meets the needs of all learners while meeting performance standards and targets set by external regulating authorities. This research addresses the gap in literature concerning educational culture in the NHS.

METHODS: This case study examines the delivery of postgraduate medical education in the workplace. Semi-structured interviews were conducted with 6 lead educators in the Medical Division of a North West NHS Trust to glean their insights into what works and what needs to change.

RESULTS: A thematic analysis of the transcripts revealed a number of factors that facilitated and hindered educational opportunities for doctors in training, including the role of leadership, the demands of external regulatory authorities, and the pressures on frontline staff to deliver safe, personal, and effective care.

CONCLUSION: Opportunities for developing a collaborative approach between educational and clinical leaders and the individuals delivering education in the workplace to enhance the educational environment are discussed. Finally, an evaluatory toolkit based on the themes emerging from the data is proposed, as a resource for other health care organisations to help improve the delivery of workplace-based medical education.

KEYWORDS: postgraduate medical education, workplace learning, educational culture, educational leadership

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Introduction

Health care providers must demonstrate that they are continually improving and streamlining service delivery and meeting targets, while not compromising the educational environment for doctors in training. The faculty guide produced by the UK National Association of Clinical Tutors was introduced to stimulate discussion on how to deliver work-based training while providing a high-quality service with safe patient care.¹ The guide acknowledges the role of workplace culture in ensuring that health care workers feel valued as members of their multiprofessional team; and advises that learning is maximised when all members of the clinical team contribute collectively to '*observing performance, advising, teaching, giving feedback and encouraging discussion*'.^{1(p2)} Guidance from the General Medical Council² encourages a similar collaborative approach for ensuring quality education in the workplace.

However, there remains a dearth of literature considering educational culture within the National Health Service (NHS), in particular examining the delivery of medical education while providing safe effective patient care.^{3–5} For doctors in training, it has been shown that their ability to understand information is more readily developed when explained within the relevant clinical context.^{6–8} Yet, internationally, barriers to workplace

learning have been identified, such as heavy workload,⁹ lack of respect for trainees,¹⁰ and unsupportive management,¹¹ as well as dealing with unforeseen events and difficult circumstances.¹² It is therefore essential that insights around workplace learning within the wider context of learning culture and educational leadership are gained from UK settings to contribute to the growing body of literature in this field.

In this article, we examine the delivery of medical education within a Medical Division in a North West of England Hospital Trust. We identify factors that facilitate and hinder education when patient care is paramount. Our findings hold relevance for other NHS Trusts balancing the delivery of safe and effective care and meeting clinical targets, whilst providing an educational environment that meets the needs of doctors in training.

Method

Semi-structured interviews were conducted to enable the interviewer (first author, S.G.) to probe and challenge opinions and thoughts, to gain a deeper understanding of the workplace educational culture. Ethical approval was obtained from Edge Hill University Faculty of Health and Social Care Research Ethics Committee, with additional approval from the Research



and Development Unit at the Trust where the research took place.

Participants were purposively recruited from the Medical Directorate of a large NHS Foundation Trust in the North West of England. Each participant was provided with an information sheet stating that participation was voluntary and that their interview would be recorded and transcribed with their permission. They were informed that their data would be anonymised on transcription, and their identity would be kept confidential. A pilot interview was conducted and transcribed as a way to inform future interview questions. The data from the pilot were not included in the data set reported here.

The research questions for the study were to identify the models of medical education that were operationalised in the workplace and to explore how effective they were perceived to be by staff. An initial interview guide was developed based on the work by Markiewicz and West¹³ who suggest key characteristics for effective team working, including team identity and objectives, role clarity, processes, and leadership. These characteristics were used as areas of enquiry when investigating the structure and delivery of medical education within the specialty. The interview guide included questions such as the following:

- Are you able to identify the leaders for medical education in the workplace?
- Are there clear objectives for the provision of medical education in the workplace?
- Do you think the educational environment in the workplace is where it should be?
- What are the barriers? What is working well?

Interviews lasted between 30 and 60 minutes and were conducted in a private area of the participant's workplace.

Interviewer

The interviewer and first author was a consultant with a role in medical education at the research site during this time. The research team recognised the potential issues with interviewing colleagues and possibility of bias, however concluded that the benefits of insider knowledge outweighed the risks. Trowler¹⁴ discusses the benefits of an 'insider' researcher being 'culturally literate' to produce meaningful accounts, leading to a better chance of impacting the field. Being part of the Trust and with experience of medical education in the Trust advantaged the study; the interviewer had the knowledge to structure the interview and ensure it remained focused on the issues at hand. The case study design of this research precludes requirement for objectivity.

Sample group

Purposive sampling was undertaken by interviewing a selection of people who were in or had recently been in educational

Table 1. Themes and subthemes.

MAJOR THEME	SUBTHEMES
The delivery of education in the workplace	Supervisor selection Valuing educators and trainees Resources Job planning
Leadership in medical education	Leadership engagement Measures and feedback Clinical targets
Learning culture	Integrating learning into working practices Shared vision for education

leadership roles within the Division of Medicine. Participants were invited to take part via direct e-mail. Although many potential informants did not reply to the e-mail and others did not have time to be involved in the research, 6 participants agreed to be interviewed: 2 educational supervisors, 3 educational leads, and a Trust Director. Four participants were men and 2 women. The research team decided that this purposive sample of key personnel was sufficient for the case study design of the project.

Analysis

As this work was designed to be reported in case study form, and the sample was purposive involving key personnel, this influenced and determined sample size and analysis; therefore, saturation was not achieved. The team met to discuss the analysis and visited the broad themes repeatedly in an iterative process to code and modify groupings of themes and develop subthemes with each reading of the transcripts.¹⁵ This resulted in subsequent revision of the generated themes on a number of occasions until the data had been rigorously explored and consensus was met. Three 'umbrella' themes were identified in the data: delivery of education in the workplace, leadership in medical education, and learning culture, which we will discuss in the next section along with their subthemes (see Table 1).

The following section will explore each analytical theme, providing representative quotes for illustration.

Results

Of the 3 global themes that were identified in the data, the first global theme – delivery of education in the workplace – encompassed a number of subthemes that focused on the barriers to delivering quality education. The second global theme – leadership in medical education – focused on the relevance of leadership to these barriers. The third global theme – learning culture – explored aspirations for developing an integrated culture of education. For each subtheme, we provide representative quotes from the transcripts.

Major theme: delivery of education in the workplace

This theme encompassed the perceived barriers to the delivery of education day-to-day.

Supervisor selection. Participants suggested that not all consultants have an interest in education, and recommended reserving lead educational roles for those who are more engaged. They suggested that the role of educational supervisor should not necessarily be expected of all consultants as is tradition:

I would have a smaller number of consultants with more trainees, each adequately timed. Some people who have a bigger interest in medical education could take on more trainees and do a better job. (P1)

Other participants acknowledged the difficulty in expecting all consultants to deliver education, when combined with high-pressure clinical commitments:

Where it is very busy it is hard to get everyone to deliver education unless they are interested in doing that. Some of them are just interested in doing their ward round quickly. (P6)

Despite all participants advocating that everyone in the workplace should be contributing to a culture that promotes education, some interviewees suggested that perhaps the more formal aspects of supervision should be reserved for those with an interest in it and who perform better based on feedback from learners. In return, participants argued there should be more recognition for the educational role on behalf of senior leaders.

Valuing educators and trainees. All participants reported that educators felt undervalued in their role. There was a general feeling that colleagues were ‘worn down’ (P4), had low morale, and lacked motivation to improve things, as one participant explained:

If I’m honest I think that there is no shortage of people waiting to tell you how rubbish you are. (P6)

Indeed, some participants noted that trainees are occasionally not valued, for example:

Sometimes I look at trainees and wonder why on earth they put up with all this! (P4)

They are our future colleagues, and sometimes they are seen as just filling a gap in the rota. (P2)

All participants discussed the importance of respecting trainees and of appreciating what they had to offer:

A lot of it comes down to how you view and treat the trainees. And how you respect them. It’s about nurturing the talent. Actually, these are really special people and if we nurture them they will fly. (P2)

Participants commented on how trainees should be recognised for their achievements while valuing their talent and helping them to fulfil their potential. The tone of the discussions centred around individualising education for trainees; participants emphasised the importance of getting to know trainees and acknowledge their individual needs and strengths: ‘Give them responsibility! Let them learn!’ (P4). Participants stressed that when trainees are valued and considered part of

the team, the hospital benefits - trainees are more likely to consider future training and substantive posts, which in turn can help improve the motivation and morale of supervisors to better the educational climate of the workplace.

Resources. Some participants reported that the current workforce was under-resourced to deal with the levels of service required while also giving time to educate doctors in training. Participants claimed there simply was insufficient people in the workplace to deliver this level of input, for example:

We try to do our best as consultants. We discuss this issue every time in our governance meeting. And everyone is trying to do their best. We are a very busy unit and it’s not always available. So really, just very rarely we do not give education if we are very busy and we are under pressure to discharge the patients as soon as possible. (P5)

However, there was a general acceptance among participants that improving patient care would improve the educational climate and vice versa:

I think that the two do marry up – those that are providing the best education also provide the best clinical care. (P1)

Further to this, some participants suggested that the specialties that struggled with the educational climate were also challenged with providing patient care, and also found staff recruitment problematic.

Job planning. When participants discussed pressures on their time, the topic of job planning arose. Most participants felt that their job plan did not accurately represent what they did and that the process of job planning was not robust:

It could be job planned. If they can just take into account teaching delivery during the ward round then we need more time. To be honest, we can’t do proper teaching delivery with the amount of work we have to do during the morning. (P5)

This participant proposed that a reduced clinical load was necessary so that job planning could include time for educational responsibilities:

We should job plan. If it’s training, instead of seeing 10 patients, you see 7 patients. Lists need job planning. Because money comes from the trainees and it’s part of our core business. (P4)

This was connected to the notion that hospital Trusts should ‘make it rewarding’ (P4) to have trainees, rather than an expectation.

Major theme: leadership in medical education

This theme encompassed discussion about the delivery of education in terms of forms of leadership and how this influenced the educational culture of the organisation in different ways.

Leadership engagement. Some participants perceived that senior clinical managers were uninterested in the delivery of education and the impact that pressures of service delivery had on the experience for learners:

The perception that the senior managers within medicine give around education is that they're not interested. And actually, perception is an awful lot of what happens in education. There are lots of things that cannot be recorded, cannot be measured, it comes down to little things that maintain people's motivation. And so people may think, well actually if the leadership can't be bothered why should I? (P1)

Clinical leadership structures were sometimes presented as disengaged from the delivery of education in the workplace. In addition, despite participants claiming to try and bring attention to the importance of education, this was not perceived to have been acted upon.

Some of the participants commented that educationalists feel they have no 'power' with middle management to make changes and that senior management should address this:

I think the Medical Director, or someone with equal credibility, should be saying to these Divisional Directors, 'Postgraduate education is just as important as patient safety. Put it at the top of your agenda. And let's see something happening about it'. (P3)

The issue of 'power' was raised by the participants as a barrier to being able to deliver medical education, with some commenting that the barrier seemed to lie within middle management. There seemed to be a general consensus that there was support for medical education from 'the top' and a willingness from 'the bottom', but that somewhere in the middle there were problems with trying to make change. The power disparity was perceived to lie in favour of clinical management, who were not always aligned to the strategy for delivery of education.

Measures and feedback. Participants felt that feedback and 'intel' from surveys were not always understood by clinical teams, as this quote shows:

I actually don't know why they are collecting numbers. To see how much time we put in maybe? To see whether the money should flow to the right people? I've no idea! (P3)

However, positive feedback was well received, for example:

... just recently feedback that I think we are doing well. We are improving. We are in all areas of the teaching in the green area, for the ward rounds and support for the trainees, we are doing well I think. (P5)

There was some discussion about the importance of constructive feedback, and some participants recommended that this be given in the form of a framework:

Doctors are competitive people – they don't want to be below the level. I think [giving constructive feedback], yes it does raise standards. Give them a framework about what we need you to deliver as a minimum and then build on it. And I think that's different from the feedback [we got] that was just negative. (P2)

All participants claimed that everyone within a trust should acknowledge and be realistic about areas for improvement that can be addressed. This theme highlights the importance of communicating the reasons for collecting metrics, as participants suggested that current methods of dissemination of feedback may be misunderstood or indeed not reach their target audience. However, this must be undertaken in a supportive manner.

Clinical targets. A common view by all was that the priority for attaining clinical targets on behalf of managers took precedence over any requirements to deliver education:

There are huge pressures around the 4 hour waits . . . They are more of a priority, as if we are having issues around beds, we will not get where we need to be as a Trust. So day-to-day, that is a measure we need to achieve. (P1)

Participants also mentioned the time pressures that they are under:

My clinics are all overbooked. It would certainly help improve the teaching and learning experience if I could have less on a clinic when there are trainees there but I wouldn't be allowed by management. (P3)

Participants claimed that clinical targets are more easily measurable and have attracted bigger sanctions if they are not met and therefore take priority over education.

Major theme: learning culture

There was much discussion about the need to develop a learning culture throughout the organisation – that it should be integral to everything and not a separate entity.

Integrating teaching into working practices. There was a concern that the delivery of medical education was not integrated into working practices. There was agreement among all participants that medical education should be continuous and perpetual, and should not be a separate entity to providing patient care, for example:

There are educational opportunities that take place all the time. And I think it just often needs a complete change in attitude. It shouldn't be, 'Right I'm doing a business round today, I'm not going to teach', it's a fundamental part of everything we do. (P1)

Another participant reflected on their own practice, demonstrating how small changes in working can result in education becoming second nature:

It just takes a different brain space. And there is a little bit of investing to do. Because if you just give that little bit of investment, then the next time you are on the ward round, actually all of those things will have happened because the trainees will understand why. So, I do think there is a little bit of a culture change that is required. (P2)

All participants highlighted the importance of integrating teaching and learning opportunities into the working day so that they become integral to clinical practice. This participant described the significance of the responsibilities involved with combining teaching with clinical work:

[We need to be] passionate, interested, giving feedback in a constructive way, creating that environment so that [the trainees] feel comfortable. There's something comfortable about raising concerns and making mistakes and admitting to them. The human stuff about being with someone and learning – it's constructive and it's relevant and meaningful. A lot of it is intuitive. (P2)

Shared vision for education. Some participants discussed the organisational culture, stating that there needs to be a shared vision for education across the Division of Medicine:

I think it needs to come from the very top of the organisation. You just need the right people in the right places to say this matters. This matters. Do it! (P4)

All participants therefore expressed a need for a change in leadership culture when considering the delivery of education in the workplace, arguing that it needs to be considered as much of a priority as achieving clinical targets.

Discussion

The findings from this study describe a system lacking in cohesiveness, where staff felt unsupported to deliver workplace-based medical education. There appeared to be a resistance to moving to a culture whereby education was intrinsic to working practice, and this was often attributed to a lack of time. This study has shown that there are many factors that hinder the development of an educational or learning culture, many of which are based on the attitudes and values of management and clinical and non-clinical frontline staff. The literature features a number of suggestions about how to address these barriers, including putting aside time and resources for team building and work-based learning.^{10,16-19} Of particular note is Clarke's²⁰ work which presents a comprehensive overview of possible solutions to these barriers, including recognising the role of the learner.

We argue that the development of a learning culture is key here. We would define learning culture as a supportive environment within which all staff members can talk freely about concerns and how to solve them, without fear of blame or punishment. A supportive learning environment is safe, fosters collaboration, values the contributions of individuals, and is based on mutual respect.

Fostering a supportive environment, one that '*motivates learning through cooperation, considers individuals' needs, and encourages participation in problem solving*',²¹ is one of the key roles in educational leadership. We argue that leadership throughout the organisation can influence this type of culture; a leader who acknowledges good work and considers the suggestions of employees is key to making this difference. Good leadership encourages employees to collaborate with other team members, and enables employees to provide the best care for patients while learning from errors.^{16,22,23} Therefore, it is clear that supportive, collaborative leadership is likely to enhance learning culture while dissuading punitive culture.

In the present study, leadership was an issue – there was a perception that middle managers had more 'power' than educational leads, and the actions of supervisors were subject to managers' approvals. There was a general sense of feeling undervalued and stressed due to tension with clinical commitments, and feeling disengaged from management with no shared vision. It seems therefore that the perceived dominant leadership behaviours within the division were more transactional in nature and that collaborative leadership was required to facilitate change. There was a palpable 'them and us' attitude from those interviewed as identified by Rose²⁴ in his report on leadership within the NHS. His observation of doctors and nurses positioning themselves in opposition to management is evident here, but in contrast it would seem that the doctors in this study felt that managers placed themselves in opposition to them. This seemed to stem from a perceived difference in values between educationalists and clinical managers, which resulted in a lack of common ground.

The participants described variable attitudes to education among medical and non-clinical staff and therefore a lack of a shared vision for educational delivery. Developing a culture of education integral to service delivery requires engagement from all stakeholders and collaboration between the clinical and educational leadership frameworks. People must feel valued and supported. Ideas and solutions must come from the frontline, and to do this they must be listened to and acted upon.⁴ We argue that Trusts must develop a culture that appreciates the importance of the educational environment and one that promotes opportunities for learning in addition to patient outcomes and targets. Undertaking the necessary number of workplace-based assessments and educational meetings is mandatory, but more emphasis must be placed on the *value* of training, and this requires educational leaders. The work undertaken by Alimo-Metcalf and Alban-Metcalf²⁵ recognises the importance of leadership in this balance and suggests the two should 'augment' each other: '*Valuing staff but not clarifying objectives and priorities is not effective; neither is showing concern while not dealing openly with performance problems and giving high-quality behavioural feedback*'.^{25(p53)} They conclude that the most important role of leaders in the NHS is

Table 2. Evaluatory toolkit.

THEME	QUESTIONS TO ASK	SUGGESTIONS	USEFUL RESOURCES
The delivery of education			
Supervisor selection and performance	Are supervisors accredited? Do supervisors have the skills to deliver workplace-based education? Are supervisors meeting expected standards in their clinical performance and appraisal?	Supervisor performance to be considered in annual appraisal. Feedback obtained for supervisor performance Coaching or mentorship for supervisors.	See HEE's Enhancing Supervision for Postgraduate Doctors in Training: https://www.hee.nhs.uk/enhancing-supervision See HEE's Standards in Supervision: https://www.hee.nhs.uk/sites/default/files/documents/Standards_4pp_Update_v2.pdf
Valuing educators and trainees	What are the attitudes of the supervisors towards learners and vice versa?	Understanding Each Other; Share to Care meetings, Schwartz rounds, networking events, forums, feedback meetings, and leaders to put forward views of each group	See the Royal College of Physicians resource on Advancing Medical Professionalism: https://www.rcplondon.ac.uk/projects/outputs/advancing-medical-professionalism
Time and resources, job planning	Do supervisors have time for education? Do business plans and service developments identify opportunities for learners? Do all training posts have job descriptions to identify the opportunities for learning?	Appropriate job planning. Education to be part of all business meeting agendas. Developing skills and sharing ideas among supervisors to 'teach when its busy' and how to make the most of every learning opportunity.	See NACT's recommendations for recognising educational roles in job plans: https://www.rcpch.ac.uk/sites/default/files/2018-02/nact-time_for_educational_roles_may15_collegetutors.pdf See Point of Care Foundation Web site for Schwartz Rounds: https://www.pointofcarefoundation.org.uk/our-work/schwartz-rounds/ See Association for Medical Education Web site for webinars on faculty development for quality clinical supervision: https://amee.org/webinars
Leadership in medical education			
Clinical leadership	Do clinical leaders understand the needs of learners? Are non-clinical leaders involved in educational meetings and the delivery of education in the workplace? Do all leaders understand the benefits of having learners in the workplace?	Engage non-clinical management in education meetings. Communicate funding streams generated from having learners on site.	See the Department of Health's tariffs and placement fees for medical placements in the United Kingdom: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/791560/education-and-training-tariffs-2019-to-2020.pdf
Education leadership	Do individuals in educational leadership posts feel empowered?	Support for educational leaders such as coaching and mentoring. Opportunities for educational leaders to be involved in Trust meetings and opportunities for networking – giving them 'airtime'.	See NHS Leadership Academy for more: https://www.leadershipacademy.nhs.uk/
Learning culture			
Learning culture	Does the Trust have shared values in its approach to developing a supportive learning environment for all learners? Is the importance of education in the workplace prioritised and promoted? Does the Trust have educational role models?	Engagement with external regulators and engaging in a shared vision across the trust. Identifying at all levels the importance of providing a supportive educational environment for all learners. Identifying an educational leadership team to help promote and role model the importance of valuing education in the workplace.	See GMC's Promoting Excellence: Standards for medical education and training: https://www.gmc-uk.org/-/media/documents/Promoting_excellence_standards_for_medical_education_and_training_0715.pdf_61939165.pdf

Abbreviations: GMC, General Medical Council; HEE, Health Education England; NACT, National Association of Clinical Tutors.

engaging staff in developing and achieving a shared vision in a supportive environment.

Taking this into account, and in agreement with Stoller,²⁶ we therefore argue that a focus on leadership is key to a change

in educational culture. In this respect, James²⁷ discusses the need for NHS Trusts to move towards collaborative leadership. She suggests that effective leadership in the NHS requires people in both formal and informal roles working collaboratively

across organisations and professional boundaries, at different levels within the organisation. The focus should move away from individual and personal leadership skills to ‘organisational relations, connectedness, interventions and changing organisational practices and processes’^{27(p6)} and importantly, ‘the key is learning with others, in and for the specific organisational context’.^{27(p13)} Rose^{24(p30)} made a number of recommendations in his review of leadership in the NHS, including the need for improved leadership training and opportunities for all NHS employers. Changes in leadership approach can be achieved using training, as demonstrated by Steinert et al.²⁸ They reviewed the literature to consider the impact faculty development schemes (promoting leadership in medical education) have on individuals and the organisation, finding consistently positive changes in faculty leadership capability and leadership styles as a result of training.²⁸

McKimm and Swanwick^{3(p434)} specifically discuss educational leadership and its place within NHS organisations:

If we are to develop a healthcare workforce capable of delivering high-quality services, then we will need to develop excellence in healthcare education, and this in turn will require educational leaders at all levels who can manage as well as lead and who can work effectively and collaboratively across boundaries.

They discuss how little theory and research there is in relation to leadership in the context of clinical education. In addition, Sholl et al⁴ have identified a lack of literature pertaining to the delivery of medical education while delivering safe effective patient care.

McKimm (2004, cited in McKimm and Swanwick³) interviewed 100 leaders in medical and health care education and identified common issues and challenges for educational leaders. Common to both studies is that those interviewed identified the difficulties of working in a rapidly changing NHS and the tensions between ‘the dual demands of higher education and the NHS – a “crowded stage” with multiple task masters’.^{3(p433)}

Acknowledging the possible limitations due to the status of the interviewer within the research site, as well as focusing on a small sample of participants within a single NHS Trust, we argue that this study highlights important and relevant issues relating to the delivery of education and how this relates to leadership structures. Along with others,⁴ we recommend further research that evaluates health care educational interventions to better understand what works for whom, under what circumstances and why, and how this can contribute to a change in culture of a workplace. We have also identified the need for future research that explores the perceived distinction between service and teaching, which specifically focuses on challenging these perceptions. Finally, we call for further research to compare NHS education leadership with models in other health care providers.

Conclusion


In response to the gap in literature considering the barriers to the delivery of workplace-based education in the NHS, we have drawn on faculty staff’s perspectives to show the aspirations and barriers involved with shaping a learning culture. We have argued that leadership is key to addressing many of these barriers¹² and propose further research focusing on leadership and educational change.

Once armed with an overview of issues impacting the delivery of education and a supportive learning environment, interventions can be developed to address them. To this end, we propose a toolkit (Table 2) that can support NHS Trusts to identify areas to address within their workplace, with suggestions on how to tackle them. This toolkit was created by the research team as a response to the themes arising from the analysis and should be used as a supplement to Health Education England’s Supervision Standards for Postgraduate Doctors in Training.²⁹

Author Contributions

SG – designed the study, submitted ethics application, performed primary literature search, performed primary data analysis, drafted and edited paper. RF – secondary literature search, contributed to data analysis, redrafted and edited paper. LM – contributed to literature review and data analysis, contributed to redrafting and editing paper

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REFERENCES

1. National Association of Clinical Tutors. Faculty guide: the workplace learning environment in postgraduate medical training. <http://www.nact.org.uk/documents/national-documents/> Published 2013. Accessed October 25, 2019.
2. General Medical Council. *Promoting Excellence: Standards for Medical Education and Training*. London, England: GMC; 2016. http://www.gmc-uk.org/Promoting_excellence_standards_for_medical_education_and_training_0715.pdf_61939165.pdf Accessed February 20, 2020.
3. McKimm J, Swanwick T. Educational leadership. In: Swanwick T, ed. *Understanding Medical Education: Evidence, Theory and Practice*. Oxford, UK: Wiley-Blackwell; 2010:419–437.
4. Sholl S, Ajjawi R, Allbutt H, et al. Balancing student/trainee learning with the delivery of patient care in the healthcare workplace: a protocol for realist synthesis. *BMJ Open*. 2016;6:11145.
5. Cleland J, Durning SJ. Education and service: how theories can help in understanding tensions. *Med Educ*. 2019;53:42–55.
6. Kallail KJ, Shaw P, Hughes T, Berardo B. Enriching medical student learning experiences [published online ahead of print January 23, 2020]. *J Med Educ Curric Dev*. doi:10.1177/2382120520902160.
7. Burgess A, Mellis C. Engaging medical students in the basic science years with clinical teaching [published online ahead of print September 2, 2015]. *J Med Educ Curric Dev*. doi:10.4137/JMECD.S18921.
8. Nisbet G, Lincoln M, Dunn S. Informal interprofessional learning: an untapped opportunity for learning and change within the workplace. *J Interprof Care*. 2013;27:469–475.
9. Delva MD, Kirby J, Schultz K, Godwin M. Assessing the relationship of learning approaches to workplace climate in clerkship and residency. *Acad Med*. 2004;79:1120–1126.

10. Jedaar Z, Marrin C, Pugsley L. How to . . . overcome barriers to effective work-based learning. *Educ Prim Care*. 2009;20:477-479.
11. Lloyd B, Pfeiffer D, Dominish J, Heading G, Schmidt D, McCluskey A. The New South Wales allied health workplace learning study: barriers and enablers to learning in the workplace. *BMC Health Serv Res*. 2014;14:134.
12. McKimm J, Mclean M, Gibbs T, Pawlowicz E. Sharing stories about medical education in difficult circumstances: conceptualizing issues, strategies, and solutions. *Med Teach*. 2019;41:83-90.
13. Markiewicz L, West M. Chapter 4. Leading groups and teams. In: Swanwick T, McKimm J, eds. *ABC of Clinical Leadership*. Chichester, UK: Wiley-Blackwell; 2011:14-18. https://scele.ui.ac.id/berkas_kolaborasi/konten/MKK_2014genap/ABC.pdf Accessed March 28, 2020.
14. Trowler P. Researching your own institution, British Educational Research Association on-line resource. <https://www.bera.ac.uk/wp-content/uploads/2014/03/Researching-your-own-institution-Higher-Education.pdf?noredirect=1> Published 2011. Accessed March 26, 2020.
15. Braun V, Clarke V. *Successful Qualitative Research: A Practical Guide for Beginners*. London, England: SAGE; 2013.
16. Stinson L, Pearson D, Lucas B. Developing a learning culture: twelve tips for individuals, teams and organizations. *Med Teach*. 2006;28:309-312.
17. Dornan T, Boshuizen H, King N, Scherpbier A. Experience-based learning: a model linking the processes and outcomes of medical students' workplace learning. *Med Educ*. 2007;41:84-91.
18. Swanwick T. Informal learning in postgraduate medical education: from cognitivism to 'culturism'. *Med Educ*. 2005;39:859-865.
19. Strand P, Edgren G, Borna P, Lindgren S, Wichmann-Hansen G, Stalmeijer RE. Conceptions of how a learning or teaching curriculum, workplace culture and agency of individuals shape medical student learning and supervisory practices in the clinical workplace. *Adv Health Sci Educ Theory Pract*. 2015; 20:531-557.
20. Clarke N. Workplace learning environment and its relationship with learning outcomes in healthcare organizations. *Hum Resour Dev Int*. 2005;8:185-205.
21. Spencer J, Jordan R. Educational outcomes and leadership to meet the needs of modern health care. *Qual Health Care*. 2001;10:ii38-ii45.
22. Kim Y-M, Newby-Bennett D. The role of leadership in learning culture and patient safety. *Int J Organ Theory Behavior*. 2012;15:151-175.
23. Edmondson AC. Learning from failure in health care: frequent opportunities, pervasive barriers. *Qual Saf Health Care*. 2004;13:ii3-ii9.
24. Rose L. *Better Leadership for Tomorrow: NHS Leadership Review*. London, England: Department of Health; 2015.
25. Alimo-Metcalfe B, Alban-Metcalfe J. The myths and morality of leadership in the NHS. *Clinician in Management*. 2004;12:49-53.
26. Stoller JK. Help wanted: developing clinician leaders. *Perspect Med Educ*. 2014;3:233-237.
27. James KT. *Commission on Leadership and Management in the NHS Leadership in Context Lessons from New Leadership Theory and Current Leadership Development Practice*. London, England: The King's Fund; 2011.
28. Steinert Y, Naismith L, Mann K. Faculty development initiatives designed to promote leadership in medical education. A BEME systematic review: BEME guide no. 19. *Med Teach*. 2012;34:483-503.
29. Health Education England. *Enhancing Supervision for Postgraduate Doctors in Training – Supervision Standards*. Leeds, UK: Health Education Executive; 2019.