

Medical Teacher



What does it mean to be a mentor in medical education?

Terese Stenfors-Hayes, Håkan Hult & Lars Owe Dahlgren

To cite this article: Terese Stenfors-Hayes, Håkan Hult & Lars Owe Dahlgren (2011) What does it mean to be a mentor in medical education?, Medical Teacher, 33:8, e423-e428, DOI: 10.3109/0142159X.2011.586746

To link to this article: https://doi.org/10.3109/0142159X.2011.586746

Published online: 20 Jul 2011.



Submit your article to this journal 🗗

Article views: 3377



View related articles



Citing articles: 8 View citing articles 🕑

WEB PAPER What does it mean to be a mentor in medical education?

TERESE STENFORS-HAYES¹, HÅKAN HULT² & LARS OWE DAHLGREN² ¹Karolinska Institutet, Sweden, ²Linköping University, Sweden

Abstract

Background: Mentor programmes are becoming increasingly common in undergraduate education. However, the meaning attached to being a mentor varies significantly.

Aim: The aim of this study is to explore how teachers in medical and dental education understand their role as mentors.

Method: Twenty mentors in two different mentor programmes for undergraduate medical and dental students were interviewed. The transcripts were analysed using a phenomenographic approach.

Results: The findings comprise three qualitatively different ways of understanding what it means to be a mentor, which are described as: (1) a mentor is someone who can answer questions and give advice, (2) a mentor is someone who shares what it means to be a doctor/dentist, and (3) a mentor is someone who listens and stimulates reflection. The way the mentors understood their role also affected what they did as mentors, their relationships with their mentees and their perceived benefits as mentors. **Conclusions:** Being a mentor can be perceived in qualitatively different ways also within the same mentor programme. This understanding affects the mentors' actions, their relationships with their mentees and their perceived benefits of being a mentor. Awareness of one's own understanding is important in improving practices and the findings of this study can be used by mentors, teachers and educational developers to facilitate improved effectiveness in mentor programmes, both for mentors and mentees.

Introduction

Mentor programmes are increasingly common in undergraduate medicine and dentistry and many positive effects have been reported (Dorsey & Baker 2004; Blanchard & Blanchard 2006; Buddeberg-Fischer & Herta 2006). However, various roles and tasks may be included in the mentor role and the definitions of a mentor in the literature are not consistent. This makes it difficult to pinpoint exactly what it means to be a mentor and the effects of mentorship. Different interpretations of being a mentor may lead to role confusion for the mentors, whom may also be supervisors, examiners or teachers (Atkins & Williams 1995; Neary 2000; Bray & Nettleton 2007), and conflicts with mentees regarding expectations may occur.

Only a small number of research studies have investigated the mentor role and its implications for the mentor and the need for research within the field of mentoring has often been expressed (Buddeberg-Fischer & Herta, 2006; Sambunjak et al. 2006; Taherian & Shekarchian 2008). In previous studies being a mentor has been shown to help build rapport between staff and students, lead to reflections upon the mentors' own practices, support students' learning and prepare students for professional practice both as clinicians and as supervisors (Atkins & Williams 1995; Lo & Brown 2000; Sword et al. 2002; van Eps et al. 2006; Löfmark et al. 2009; Stenfors-Hayes et al. 2010, 2011). A large number of papers include competencies or requirements for being a good mentor, such as (Garmel 2004; Rose et al. 2005; Taherian & Shekarchian 2008; Frei et al. 2010). Studies from other fields focus for example on mentor

Practice points

- Many positive effects can be linked to being a mentor for an undergraduate student.
- The effects of being a mentor, what the mentors do and how they perceive their tasks are related to how the mentor role is understood.
- The mentor role may be understood as someone who listens and stimulates reflection, a role model or as someone who can answer questions and give advice.
- Understanding how the mentor role is interpreted is central when implementing a mentor programme as it will also affect the mentor's relationship with the student.

and mentee expectations and the effects of being a mentor (Franke & Dahlgren 1996; Hawkey 1998; Ehrich et al. 2002; Gilles and Wilson 2004; Milner and Bossers 2004; Lopez-Real & Kwan 2005; Storrs et al. 2008). However, as understandings of what it means to be a mentor and what the role includes varies, these findings may be difficult to use.

In contrast to this, ways of understanding teaching and approaches to teaching have been explored by several researchers (Trigwell & Prosser 1996; Kember 1997; Kember & Kwan 2000; Samuelovicz & Bain 2001; Åkerlind 2004; Postareff & Lindblom-Ylänne 2008). These studies all show similarities in the focus towards either the transmission of information to students or the development of understanding

Correspondence: T. Stenfors-Hayes, CME/LIME Karolinska Institutet, 17177 Stockholm, Sweden. Tel: 0044-8-52483737; fax: +46-8-34-51-28; email: terese.stenfors-hayes@ki.se

in students and an associated focus towards either the teacher and their teaching strategies or the learner and their development. Pratt (1992), however presents five different perspectives on teaching in terms of a transmission, developmental, apprenticeship, nurturing and social reform perspective. Each of these is an interrelated set of beliefs and intentions and a set of philosophical orientations to being a teacher.

The aim of this study is to explore how teachers in medical and dental education understand their (new, formalised and additional) role as mentors. To achieve this, mentors (that were also teachers) in two different mentor programmes have been interviewed.

The mentor programmes

The respondents of this study were selected from two different mentor programmes. In both programmes, the mentor's role was described as focusing on supporting and guiding students in their professional development. No assessment or supervision was included in the role and everything discussed with the mentees was confidential. The mentors were recommended to meet their mentees 1-3 times each semester in a quiet location. The meetings were supposed to be menteefocused based on dialogue aiming to support the mentee. Prior to the establishment of the mentor programmes, there was no other mentoring or personal tutor scheme associated with the study programmes. The mentor programme for undergraduate dental students ran during the whole 5-year Dentistry programme. All 66 mentors were licensed dentists and responsible for a group of three to five mentees. The other mentor programme was designed for medical undergraduate students starting their fifth semester (the first clinical course) and ran for 2 years. There were 83 mentors (medical doctors) in the programme all responsible for 1 mentee each. This means that in both programmes, some mentees were close to graduation and some completed their studies. Mentor training was offered to all mentors in both programmes for 1 or 2 days. Follow-up meetings were also provided. Most mentors participated in the training whilst the attendance to the follow-up meetings was lower. In the training the participants' preconceptions, experiences and concerns regarding their new role as mentors were discussed. All mentors also held a separate role as teachers, giving lectures or being involved in assessment or course planning. In most cases, the mentors were also clinical supervisors. Most mentors met their mentees in their teaching role at some occasion, for example as a lecturer. The amount of teaching the respondents were involved in varied significantly. Some considered themselves full-time teachers whilst others did not see themselves as having this role at all, despite supervising students as part of their tasks at the clinic.

Methods

Empirical data were gathered by semi-structured interviews with 10 mentors from each of the two programmes. The two groups of respondents were used to widen the respondents' backgrounds and experiences. The interviewees were selected to represent the variations (Larsson 2009) in the mentor group in terms of sex and age and each selected mentor had to have

met their mentee at least three times. All respondents had been mentors for between 2 and 4 years. The age of the respondents varied from people in their 30s to their 60s; men and women were included and some respondents had received their degrees in other countries, within and outside of Europe. All mentors were licensed medical doctors or dentists. The respondents' academic positions varied as some were still in specialist training whilst others were full professors, clinic managers, senior lecturers, cardiologists, psychiatrists, programme directors, senior researchers, etc. Some respondents had been teaching undergraduate students more or less daily for years, and others hardly considered themselves teachers at all but did occasionally lecture and supervise students in a clinic. Some respondents had participated in teacher training, usually for a couple of weeks, whilst others had no such training.

The interview questions covered such things as what it meant to be a mentor for the respondents, what they did as mentors, possible consequences of being a mentor and differences between being a mentor and a teacher. Since the point was to explore as many aspects of mentoring as possible, most questions followed on from what the respondents answered to the previous question (Cousin 2009). The interviews were subsequently transcribed *in extenso* to constitute the final material for the analysis.

The analysis was carried out within a phenomenographic research perspective, i.e. different ways of experiencing the phenomenon of mentoring were described and analysed with regard to qualitative differences (Marton 1981; Marton & Booth 1998). The analysis followed an iterative procedure as described below (Dahlgren & Fallsberg 1991):

- All transcripts were read and meaning units identified.
- Units were compared and then grouped based on similarities in the way of expressing the experience of the phenomenon of mentoring.
- The meaning of each group was articulated and the categories labelled.
- The resulting categories in the final outcome space (range of understandings) were compared in terms of what they comprised and what they did not comprise.

The outcome of a phenomenographic study is categories which describe differences in how the research object can be understood. The different ways of understanding are logically related and often, but not always, represent different breadths of awareness (Marton & Booth 1998). The categories that are identified are a negotiated outcome between interviewer and interviewee; as such they are heuristic devices that can help advance our understanding of a phenomenon (Cousin 2009). When performing a phenomenographic analysis, all the data are viewed as one set rather than keeping each respondent separate. The descriptions are therefore related to the group or the 'pool of meanings' rather than the individual respondents (Marton & Booth 1998). The way a phenomenon is understood is furthermore context-sensitive rather than a stable construct. For reasons of credibility 10 of the interviews were analysed by two of the authors independently and findings compared and discussed until negotiated consensus was reached (Wahlström et al. 1997).

Results

When analysing the transcripts, three different but related ways of understanding the mentor role were identified. These range from a mentor/expertise-focus in category A to a mentee-focus in category C. The findings do not emphasise individual respondents' understanding, but rather the collective understanding of the group (Åkerlind 2005). For individual respondents, the categories are not necessarily mutually exclusive. This means that aspects such as expertise that are emphasised in category A can also be considered an aspect for a mentor that shares an understanding of being a mentor closer to category C. Responses from both dentists and MDs have been used to illustrate the three ways of understanding. The way in which the mentor role was understood was also found to affect: (1) what the mentors did as mentors, (2) their relationship with their mentees and (3) the effects that their mentor role had on themselves. These three aspects are described for each category.

A mentor is someone who can answer questions and give advice

This category represents an understanding of a mentor being someone who possesses a certain expertise in the field that the mentee is entering and who is willing to share it by giving advice and answering questions, especially if the questions concern the mentor's special field of interest. All responses in this category had in common the lack of a recurrent theme in what was discussed in the meetings. Personal, practical and professional topics have been brought to the fore very much randomly as it were.

We talked a lot and I answered quite a few questions, answered a few questions and tried to talk about various things.

You try to find what your mentee is interested in and what you think might be interesting and useful for them to hear about, then you talk about that. That is how it has been.

The focus of the meetings is neither the individual mentee nor the mentors themselves, but the provision of information and advice. Some respondents did not seem to have reflected much on their mentor role and how they thought a mentor should act and some also expressed doubts about the effectiveness of the mentor programme.

The mentors appreciated learning more about the undergraduate study programme and gaining insights into how mentees think about their education.

I hear what their thoughts are and learn something new about that generation since they are younger than me. I learn their schedule and what they study most on since I usually ask how much time they spend on certain parts of a course. I've been given quite a lot of information from them so I keep updated on the undergraduate programme and on how these 20-something people think about it. However, the roles of a teacher and of a mentor were often perceived as incomparable, as described below.

Yes, there is a very big difference. As a teacher you need to transmit knowledge, or maybe that was an old fashioned expression. Well, your job is to make them learn and there is a certain amount of material to go through. I don't need to think like that as a mentor, as a mentor I am more of a person. There is not the same pressure on me, or on the students to achieve something.

A mentor is someone who shares what it means to be a doctor/dentist

The core of this way of experiencing what it means to be a mentor is to share with the mentee what being a doctor or dentist is like. The contribution of mentoring lies in talking and acting as a doctor/dentist. Some also tried to help the mentee into their community of doctors and tried to normalise the mentee's understanding of being a doctor/dentist. In this category, the focus is on the professional role as a doctor/ dentist, but often in combination with other roles. Some mentors shared aspects of their lives with their mentees such as being a parent, or a woman in a male-dominated speciality. These mentors may also give advice or feedback but in most cases only when this was explicitly requested by the mentees. Compared to category C, this understanding holds a certain focus on the mentor and the professional role rather than personal development of the mentees. However, this understanding may well include mentee-centred activities.

I help someone become part of the doctor community, this is how you think, this can be tough, this is good, this is fun... And she said she liked seeing me enjoying my job and she thought it was stimulating to see doctors from other clinics than your own.

I tell her about my own experiences as a student, as a new dentist and as an experienced one. How I perceive of different situations, for example with patients. I've worked in a lot of different places. I have given her examples of some difficult things that may happen with patients and so on.

This mentor role is not experienced as being as reciprocal as category A but was often described as very friendly and open.

Being a mentor is sharing your professional experiences rather than telling them what to do in case of a heart failure. It feels good, there is so much to a profession that you can't share through a course book but that you can share in a mentor situation. It feels very good. That's number one. And secondly you get to hear about another person's problem and perhaps help them solve them or at least make them easier. And sure it might be that they think 'Oh my God she is so old, she doesn't understand anything!' But so what? Then let that be, let them throw that piece of advice away then, they can use what they find useful. A younger mentor reflected that it was nice to see that they had come so far in their own development that they were able to help someone else, and thereby getting their own professional role reinforced. Another mentor claimed that being a mentor helped them confirm their professional role and strengthen it.

A mentor is someone who listens and stimulates reflection

Some of the answers indicate that the mentor saw themselves as a sounding wall, someone who listens and functions as a catalyst i.e. an entity that affects a process by simply being present. The metaphor of being a guardian angel was also used to describe that they wanted to 'be there' for the students.

You should be supportive rather than directing them. You should try and make the person you are listening to take the next step themselves. That is the most important function. They find the solution themselves and feel supported.

Many expressed how they did not think their role should focus on problem solving or giving advice; instead, they listened and stimulated reflection to empower the mentees to make their own decisions. Sometimes, when asked to, the mentors shared some of their own experiences.

We have discussed things that she is struggling with and I have encouraged her to think for herself and make her own decisions...I think I fill a function as an example (role model).... And she can use me in whatever way she wants to. And she can be personal, I think that is important.

This role as a listener led to reflection among the mentors and curiosity about university life today, from an undergraduate perspective.

It makes you reflect on your own studies, and you get curious about what has changed at university, when it comes to learning and things like that.

Being better acquainted with some of the students was also found to be useful when trying to facilitate learning as a teacher. To receive this continuous feedback on what it is like to be a new student was considered important. One mentor described it fascinating to follow the students in their indecisiveness about whether they had made the right choice or not and to follow their professional development.

I think it is great to follow their development. I've seen it, from being so insecure, seeing how it changed, how they've developed. It has been great to see. They are almost done now, it's incredible.

Listening to the students' experiences of different courses and lectures also made some of the mentors reflect upon their own teaching.

They've been complaining about some courses and lectures lately and of course, it happens automatically, you start thinking 'I wouldn't do it like that' (as a teacher) so you get a chance to repair your own teaching. The two roles of being a teacher and a mentor were found to be very similar and some claimed that a good mentor is in fact the perfect teacher.

To be honest I find them difficult to separate. The only difference is that as a teacher you have a certain topic which limits you. Apart from that I have the same attitude in both situations.

So if you want to be a good teacher then...

You need to be a mentor.

Another mentor described the mentor role as being 'more inclusive' or broader than the teacher role.

Discussion

In this study, three ways of understanding what it means to be a mentor were identified in the context of two different mentor programmes. These three ways of understanding also affected what the mentors did, their relationship with their mentees and the effects that their mentor role had on themselves. The three categories were described as:

- (1) A mentor is someone who can answer questions and give advice.
- (2) A mentor is someone who shares what it means to be a doctor/dentist.
- (3) A mentor is someone who listens and stimulates reflection.

Depending on how the mentor role was understood, the mentors acted differently: In category A, the mentors tell the mentees things they think they should know and give advice (which is not necessarily based on the mentees' requests). In category C, they function as sounding walls and reflective partners who might encourage independent decision making and thinking.

The relationship between mentor and mentee also varies and can be described as mentee-focused in category C, since the mentees questions and reflections are in focus. One mentor describes their role as someone that the mentee can use in whichever way they want. A quotation that can be linked to category B describes the mentor–mentee relationship as being more reciprocal than the teacher–student relationship and the mentor sometimes jokingly wondered who in their relationship that was the mentor and who was the mentee. In category A, however, the mentor controls the meetings and their content.

The mentors looked upon their task as something they did for the students and not for their own development, as the aim was to support the students' personal and professional development. Hence, many of them described difficulties in verbalising the perceived benefits of being a mentor. The identified benefits linked to mentoring are in line with previous studies in that it is perceived as something that leads to improved teaching and student learning (Atkins & Williams 1995; Lo & Brown 2000; Sword et al. 2002; van Eps et al. 2006; Löfmark et al. 2009; Stenfors-Hayes et al. 2010; Stenfors-Hayes et al. 2011). However, this study shows that the perceived effects of being a mentor are linked to how the mentors understand their role. The effects identified in the last category ('A mentor is someone who listens and stimulates reflection') included an increased understanding of the students' situation and improved relationships with students. This has previously been shown to improve the quality of teaching, student learning and undergraduate education (Vaughn & Baker 2004). One mentor also mentioned how he/she developed by being confronted with their mentees ideas and expectations even if the development may take some time and the effects, such as increased self-insight are not immediate. In the middle category ('A mentor is someone who shares what it means to be a doctor/dentist'), mentoring was described as rewarding since the mentors could follow the mentees' professional development and had an opportunity to share their tacit and non-medical experiences of being a doctor. Being a mentor also encouraged mentors to reflect upon their own roles as teachers and doctors/dentists and due to this their identity in their professional role might have been strengthened. One respondent also claimed that it affected their teaching by them realising that 'it is not only students but actual human beings' that attend the courses. Mentors who conceived of their role as being similar to the first category ('A mentor is someone who can answer questions and give advice') also saw benefits, but to a lesser degree and benefits mainly related to learning about the curricula rather than related to the students themselves. In this mentor/mentee relationship, the mentee takes on a more passive role as a listener and spectator. Hence, the mentor does not get an active partner to reflect their own experiences with, as is the case in the situations created by a mentor who acts according to an understanding as equivalent of category C ('A mentor is someone who listens and stimulates reflection').

As no similar study on understanding the mentor role exists, the findings of this study can instead be linked to previous studies regarding teaching and clinical supervision. For example, role modelling is frequently quoted as being one of the roles of a clinical supervisor (Prideaux et al. 2000; Mann et al. 2001; Parsell & Bligh 2001) and this role was also mentioned in this current study regarding what it means to be a mentor, especially in the middle category ('A mentor is someone who shares what it means to be a doctor/dentist'). The range of understandings of teaching from student-centred to teacher-centred can also be seen in the identified understandings of being a mentor as described above. Some similarities can furthermore be seen between category B ('A mentor is someone who shares what it means to be a doctor/ dentist') and Pratt's apprenticeship perspective of being a teacher and category C ('A mentor is someone who listens and stimulates reflection') and Pratt's (1992) nurturing perspective.

By conducting an in-depth qualitative study, this article contributes to the need for research within the field of mentoring and facilitates the understanding of previous findings by clarifying how the mentor role may be understood and what effects this may have. The choice of two study programmes brings about a variation in the experience of the respondents regarding the content of the role as a mentor. With an even larger sample, the likelihood of finding more ways of understanding would have increased. There are no observational data as to what the mentors actually do in their role as mentors, which may be a suitable focus for a future study.

The findings show that being a mentor can be understood in three qualitatively different ways and depending on which one of these understandings a mentor can be linked to, their actions as mentors and the perceived effects of being a mentor varies. Awareness of one's own understanding is important in improving practices and the findings of this study can help make explicit individual interpretations of the mentor role. This awareness can help avoid role confusion for mentors and conflicts regarding different expectations with mentees. The findings can also be used when developing mentor programmes or providing mentor training. Medical teachers interact with students in a number of different situations and through a number of different roles. By exploring the effects of various contexts and perceptions of the different roles, important aspects of teacher-student relationships are brought to the fore and thereby the facilitation of student learning can be highlighted.

Acknowledgements

Terese Stenfors-Hayes conducted the interviews, analysed the data and wrote this article. All authors contributed to the design of the study, parts of the analysis and with valuable feedback on drafts of the paper. The authors thank all interviewed mentors and Sofia Tranaeus and Anna Josephson for valuable feedback on drafts of this article.

Declaration of interest: The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.

Notes on contributors

TERESE STENFORS-HAYES, PhD, at Centre for Medical Education (CME) LIME, Karolinska Institutet. Her research interests include the role of the teacher in higher education and faculty development.

LARS OWE DAHLGREN, PhD, is a professor of Education at Linköping university. His research interests comprise higher education in general, medical education, inter-professional education, problem-based learning, patient communication, and qualitative analysis (phenomenography).

HÅKAN HULT, PhD, is an associate professor of Education at Linköping University. His research interests comprise higher education in general, medical education, pedagogical processes in health care, educational design and assessment.

References

- Atkins S, Williams A. 1995. Registered nurses' experiences of mentoring undergraduate nursing students. J Adv Nurs 21:1006–1015.
- Blanchard SB, Blanchard JS. 2006. The prevalence of mentoring programs in the transition from student to practitioner among US Dental Hygiene programs. J Dent Educ 70:531–535.
- Bray L, Nettleton P. 2007. Assessor or mentor? Role confusion in professional education. Nurse Educ Today 27:848–855.
- Buddeberg-Fischer B, Herta K. 2006. Formal mentoring programmes for medical students and doctors: A review of the medline literature. Med Teach 28:248–257.

Cousin G. 2009. Research learning in higher education. London: Routledge.

Dahlgren LO, Fallsberg M. 1991. Phenomenography as a qualitative approach in social pharmacy research. J Soc Admin Pharm 8:150–156.

- Dorsey LE, Baker CM. 2004. Mentoring undergraduate nursing students assessing the state of the science. Nurse Educat 29:260–265.
- Ehrich I., Tennent I., Hansford B. 2002. A review of mentoring in education: Some lessons for nursing. Contemp Nurse 12:253–264.
- Franke A, Dahlgren LO. 1996. Conceptions of mentoring: An empirical study of conceptions of mentoring during the school-based teacher education. Teach Teach Educ 12:627–641.
- Frei E, Stamm M, Buddeberg-Fischer B. 2010. Mentoring programs for medical students: A review of the pubmed literature 2000-2008. BMC Med Educ. 10.
- Garmel GM. 2004. Mentoring medical students in academic emergency medicine. Acad Emerg Med 11:1351–1357.
- Gilles C, Wilson J. 2004. Receiving as well as giving: Mentors' perceptions of their professional development in one teacher induction program. Mentoring and Tutoring 12:87–106.
- Hawkey K. 1998. Mentor pedagogy and student teacher professional development: A study of two mentoring relationships. Teach Teach Educ 14:657–670.
- Kember D. 1997. A reconceptualisation of the research into university academics' conceptions of teaching. Learn Instruct 7:255–275.
- Kember D, Kwan K-P. 2000. Lecturers' approaches to teaching and their relationship to conceptions of good teaching. Instr Sci. 28:469–490.
- Larsson S. 2009. A pluralist view of generalization in qualitative research. Int J Res Meth Educ 32:25–38.
- Lo R, Brown R. 2000. A clinical teaching project: Evaluation of the mentorarranged clinical practice by RN mentors. Collegian 7:8–14.
- Lopez-Real F, Kwan T. 2005. Mentors' perceptions of their own professional development during mentoring. J Educ Teach 31:15–24.
- Löfmark A, MorbergÅ, Ilicki J. 2009. Supervising mentors' lived experience on supervision in teaching, nursing and social care education: A participation-oriented phenomenological study. Higher Educ 57:107–123.
- Mann K, Holmes D, Hayes V, Burge F, Viscount P. 2001. Community family medicine teachers' perceptions of their teaching role. Medical Education 35:278–285.
- Marton F. 1981. Phenomenography: Describing conceptions of the world around us. Instr Sci 10:177–200.
- Marton F, Booth S. 1998. Learning and awareness. New York: Erlbaum.
- Milner T, Bossers A. 2004. Evaluation of the mentor-mentee relationship in an occupational therapy mentorship programme. Occup Ther Int 11:96–111.
- Neary M. 2000. Supporting students' learning and professional development through the process of continuous assessment and mentorship. Nurse Educ Today 20:463–474.
- Parsell G, Bligh J. 2001. Recent perspectives on clinical teaching. Med Educ 35:409–414.

- Postareff L, Lindblom-Ylänne S. 2008. Variation in teachers' descriptions of teaching: Broadening the understanding of teaching in higher education. Learn Instruct 18:109–120.
- Pratt D. 1992. Conceptions of teaching. Adult Educ Q 42:203-220.
- Prideaux D, Alexander H, Bower A, Dacre J, Haist S, Jolly B, Norcini J, Roberts T, Rothman A, Rowe R, et al. 2000. Clinical teaching: Maintaining an educational role for doctors in the new health care environment. Med Educ 34:820–826.
- Rose GL, Rukstalis MR, Schuckit MA. 2005. Informal mentoring between faculty and medical students. Acad Med 80:344–346.
- Sambunjak D, Straus SE, Marusic A. 2006. Mentoring in academic medicine. JAMA 296:1103–1115.
- Samuelovicz K, Bain JD. 2001. Revisiting academics' beliefs about teaching and learning. High Educ 41:299–325.
- Stenfors-Hayes T, Kalen S, Hult H, Dahlgren LO, Hindbeck H, Ponzer S. 2010. Being a mentor for undergraduate medical students enhances personal and professional development. Med Teach 32:148–153.
- Stenfors-Hayes T, Lindgren L-E, Tranæus S. 2011. Perspectives on being a mentor for undergraduate dental students. Eur J Dent Educ. 14 [Early view ahead of print].
- Storrs D, Putche L, Taylor A. 2008. Mentoring expectations and realities: An analysis of metaphorical thinking among female undergraduate protegés and their mentors in a university mentoring programme. Mentoring and Tutoring 16:175–188.
- Sword W, Byrne C, Drummond-Young M, Harmer M, Rush J. 2002. Nursing alumni as student mentors: Nurturing professional growth. Nurse Educ Today 22:427–432.
- Taherian K, Shekarchian M. 2008. Mentoring for doctors. Do its benefits outweigh its disadvantages? Med Teach 30:e95–e99.
- Trigwell K, Prosser M. 1996. Changing approaches to teaching: A relational perspective. Stud High Educ 21:275–284.
- Wahlström R, Beermann B, Dahlgren LO, Diwan V. 1997. Changing primary care doctors' conceptions: A qualitative approach to evaluating an intervention. Adv Health Sci Educ Theory Pract 2:221–236.
- Van Eps MA, Cooke M, Creedy DK, Walker R. 2006. Mentor evaluation of a year-long mentorship program: A quality improvement initiative. Collegian 13:26–30.
- Vaughn LM, Baker RC. 2004. Psychological size and distance: Emphasizing the interpersonal relationship as a pathway to optimal teaching and learning conditions. Med Educ 38:1053–1060.
- Åkerlind G. 2004. A new dimension to understanding university teaching. Teach High Educ 9:363–375.
- Åkerlind G. 2005. Variation and commonality in phenomenographic research methods. High Educ Res Dev 24:321–334.