


The teacher as coach: An innovative, longitudinal training for (bio)medical educators

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Abstract

Background: In order to be impactful, to support students to become resilient, adaptive, and collaborative lifelong learning professionals in an ever-changing environment requires the teachers to have a specific set of skills and abilities. Teachers who are not taught these competencies struggle empirically and cannot coach students effectively in the modern professional world.

Approach: We developed a longitudinal programme for teachers, combining theory and skills training, and performed nine half-day hands-on training modules on campus. Special attention was paid to a common frame of mind, coaching techniques, and dealing with students' emotions and resistance.

Evaluation: All 16 participating teachers indicated their learning goals beforehand and their learning outcomes afterwards. Before and after finishing the course, participants completed a questionnaire in which they evaluated their own evolving coaching competencies. In the next academic year, students of both participants and non-participants evaluated their teachers' coaching competencies. Participants experienced the added value of coaching and understood how to coach. They reported being able to focus on fostering the student's development instead of being knowledge-transferring and advising mentors. Students recognised that coaching teachers (participants) provided less advice and focused more on students' responsibility.

Implications: To prepare teachers for coaching students in their professional development, early investment is recommended. A dedicated coach training programme, as outlined by us, can facilitate and stimulate the desired transition from a role-modelling, knowledge-transferring academic teacher, mentor, or adviser to a professional development coaching teacher. When translating to other curricula, we recommend to take into account the adaptation of generic content in the local learning environment.

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1 | BACKGROUND

To keep up with the actual changing healthcare environment, medical students require generic reflection skills, leadership skills, versatility, and resilience (horizontal bar) next to in-depth and specific expert knowledge (vertical bar) to become 'T-shaped professionals', a model introduced by Frenk.¹ These generic competencies are not ingrained; they need to be developed. Similarly, educators in coaching roles require training to support their learners in their skill development. The value of a mentor supporting students in their personal and professional development has been recognised.² Burgess emphasises the involvement of both an educational and a coaching role in mentoring.² Coaching aims to support students effectively in their study, with their personal challenges, to create consciousness and develop self-confidence. With coaching competencies, teachers have the ability to encourage students' self-discovery journeys to enhance professional development and unlock their potential, which requires far more than being a role model.

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A new longitudinal programme to address training in generic skills, 'Longitudinal Personal-Professional Development' (LPPD), was implemented at our medical faculty as part of the redesign of the (bio) medical curricula for undergraduate students based on self-determination learning concepts.³⁻⁵ 'Coaches' in this LPPD programme were (bio)medical teachers selected based on their connection with the students' intended future field of work and their basic enthusiasm to support students. Before the start of their coaching job, all teachers participated in two workshops on training individual coaching and group dynamics, respectively. After implementing the LPPD programme, students noted undesirable variations in their coaching, and teachers themselves felt the need to enhance their coaching abilities.

Most teachers, positioned to be mentor are not sufficiently trained, mentoring is often executed empirically with ad hoc methods and approaches resulting in a wide undesirable range of effectiveness, intensity, and consistency.

Our observation matches with literature. As most teachers, positioned to be mentor are not sufficiently trained, mentoring is often executed empirically with ad hoc methods and approaches resulting in a wide undesirable range of effectiveness, intensity, and consistency.⁶ Although the literature discusses the possible merits of coaching and the features of an effective mentor, there is a gap in the literature on effective training programmes for teaching staff to adapt to the coaching role.^{7,8}

We aimed to develop a training programme, intertwined with actual teaching, focused on theory, personal learning goals, and practical tools and skills training for individual and group coaching. Together with external professionally certified coaches, we co-created learning activities and co-designed content in order to develop a training that will be useful, efficient, and feasible for teachers. These certified coaches also conducted the training, that was evaluated afterwards.

We developed a training programme, intertwined with actual teaching, focused on theory, personal learning goals, and practical tools and skills training for individual and group coaching.

In this paper, we describe a newly developed coach training programme (CTP) to improve coaching knowledge and skills, as well as its potential to improve coaching competency. We describe evaluation results and implications for next steps.

2 | APPROACH

2.1 | Coach training programme—Content and learning activities

The first edition of CTP was offered to 16 participants and consisted of nine half-day training modules on campus, each with a particular theme, regularly spread over one academic year. In each module, theoretical background, goals, coaching techniques, practical tools, and, in workshop setting, skills were discussed, demonstrated, and trained by performing in simulated settings with direct observation and feedback. In between modules on campus, participants studied the background and practise of coaching from two international standard books about coaching, attended webinars, and met their students at least twice. They applied what they learned and carried out practical assignments with their students. Participants were invited to put questions left on the agenda for the next CTP module.

Participants are engaged in a learning group, introduce their learning goals based on experiences so far, elaborate their perspectives on coaching, connect conceptual models with concrete experiences, and apply what is learned in practice immediately.

Two professional Master Certified Coaches led this newly designed longitudinal CTP; these coaches discussed theoretical concepts, instructed participants, performed the roles of simulated students in practical training workshops, and gave feedback in role playing sessions. In each module, participants and the leading coaches looked back (e.g., evaluated, collected questions, and determined the need for CTP adjustment) and looked forward (e.g., determined the needs assessment of participants) to (re)design the tailor-made CTP.

The leading certified coaches also coached the participants in two individual, personalised sessions to give the participants the experience of being coached and to support them in their personal development to become coaches (Figure 1).

In the CTP, a variety of topics directly related to the coaches' future work in the LPPD programme and the students' learning goals were covered, as shown in Box 1. Both individual and team coaching were included in the CTP since the coaches support their students individually as well as in group settings.

3 | EVALUATION

Approximately 100 teachers participated in the LPPD programme for (bio)medical students since 2018. Considering the diversity in the background of these teachers, a sample of 16 teachers was selected for this pilot training. Selection criteria included both more and less in coaching experienced teachers, gender (four men, 12 women), background, and field of work of the teacher (Biomedical Sciences [8] or Medicine [8], proportional distribution of the different clinical and research departments).

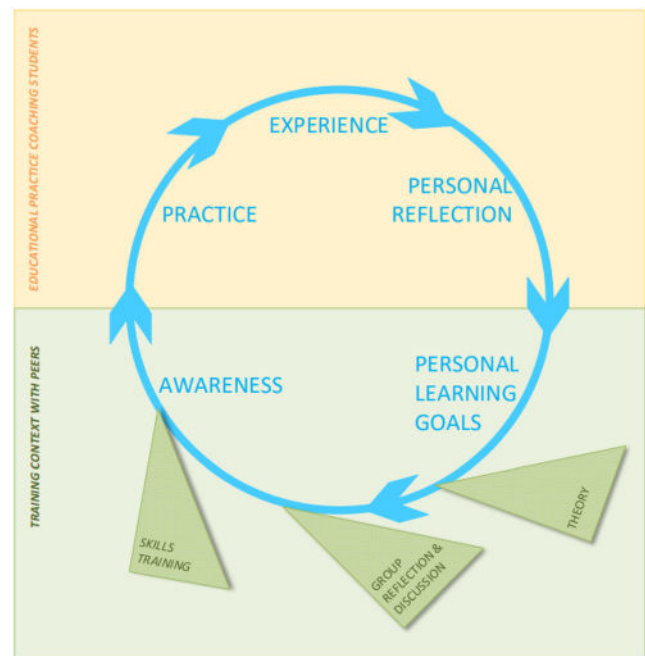


FIGURE 1 Model of the experiential learning cycle of participating teachers in the CTP. The participants are engaged in a learning group, introduce their learning goals based on experiences so far, elaborate their perspectives on coaching, connect conceptual models with concrete experiences, and apply what is learned in practice immediately. Students meet the teachers in both group settings and individually on a wide range of topics. In green is the coach training environment for the participants, and in yellow is the workplace environment for the participants in which they individually meet their students for coaching.

BOX 1 Template of the what and how of CTP: nine half-day modules (themes, content and learning objectives) and learning activities for developing coaching skills.

Themes and content of the nine modules—Learning objectives

1. Framework of coaching: Development of a common conceptual and working framework concerning the vision, role, and attitude of a coach; boundary markers between coaching, mentoring and advising
2. Coaching styles: Different coaching styles to meet the contextual variety; move away from consultancy, let the coachees arrive at their solutions
3. Contracting: Designing an alliance between coach and coachee—assisting with reasonable and feasible goals setting for the coachee—providing structure
4. Personal qualities: Awareness and effective use of personal qualities in the role as coach - empathy
5. Coaching skills: To broaden and deepen coaching skills by asking powerful questions, expanding awareness of and dealing with upstream and undercurrent, using the T-GROW model, implementing a feedback and solution-focused approach; rational emotive therapy model (Albert Ellis)
6. Resistance: To deal effectively with students' resistance, lack of motivation; 'I do not have problems'
7. Barriers and facilitators: To recognise and handle the students' and one's own personal barriers in the personal development process - to identify inner voices
8. Team dynamics: Coaching a team: Beckhard's team effectiveness model, Tuckman's developmental sequence in small groups, group dynamics
9. Team coaching: To guide group meetings effectively with the aim to promote peer-assisted learning and professional development among students

Learning activities

Theory: international literature and books, e-learning, webinars, expert sessions, film fragments

Reflection and discussion: individually as a coachee, and in small group settings, group debates, peer-assisted sessions, practice-based learning sessions, reflection reports

Skills training: training coaching skills in simulation sessions with direct observation and feedback of the expert, role playing sessions, simulation games, audio and video recording sessions, practical assignments with other participants in workshops and with students, observation of real coaching sessions to recognise coaching concepts and skills, motivational interviewing, impactful storytelling, listening on three levels, empowerment skills, creating accountability

Coaches' toolkit—Collected during training

Exercises for group and individual coaching to encourage reflection, feedback and feedforward, collaboration, communication, self-assessment, self-evaluation, self-determination, identity formation, resilience, empowerment, taking care of one's own well-being

Strength tests

How to embark

Background information—literature about coaching

Before the CTP began, participants identified their own coaching skill gaps based on their experiences, inconveniences, and discomfort in their role as a coach so far, as well as their ambition to develop themselves in their coaching role. At the end of the course, the participants evaluated and described in a personal written open text report their own development and considered whether they had filled this gap. An inductive analysis was performed on the free text narrative evaluation reports to collect common themes.

All 16 participants were also invited to respond to a 33-item questionnaire before and after the 1-year training cycle, rating their various coaching skills on a 5-point Likert scale and evaluating the course. At the end of the next academic year, students of both participants in the CTP and teachers without the extra training responded to a 15-item questionnaire about the students' perspective on their teacher's coaching skills. Data from the quantitative Likert scale (1–5) were entered into an Excel spreadsheet for analysis. Representative quotations were translated into English.

I thought I was coaching but now I realise that I was listing problems and solving them like a consultant.

3.1 | Ethics approval

This study was approved by the Research Medical Ethics Committee (CMO) of the Radboud University Medical Centre (case number: 2020_6518). Informed consent was obtained from all participants. Students' questionnaires were completed voluntarily and analysed anonymously.

3.2 | Participants' responses

All 16 participants provided their individual free-text narrative written evaluation and additionally completed the structured questionnaire after finishing the CTP.

One of the main themes identified in the inductive analysis was a learning curve from more or less unconscious incompetence through conscious incompetence to conscious competence now that teachers understood the meaning and application of coaching in education. Being coached yourself is important and helpful as an example of experiential learning.⁹

From more or less unconscious incompetence through conscious incompetence to conscious competence now that teachers understood the meaning and application of coaching in education.

The insights gained from being coached were a reason to ask for more individual sessions. Participants emphasised achieving more of their learning objectives than expected, exceeding their expectations, and implementing their new coaching approaches. The participants appreciated being trained by well-organised, officially certified coaches with extensive expertise in different learning environments. Bringing in their new perspective and expertise was both positive and challenging for the participants. Finally, participants emphasised the positive effects on their personal and professional development and well-being, the lifelong learning cycle, and the effects on their colleagues and healthcare professionals in their working department. The most noticeable learning outcomes are summarised in Box 2. Quotes from the narrative feedback at the end of the CTP are presented in Box 3. Figure 2 illustrates a selection of items from the participants' questionnaire, showing the shift in agreement with statements on several topics before and after the CTP.

I now have a better understanding of what coaching is all about.' 'It is really beautiful that the student discovers his/her affordances, is allowed to be himself/herself, and acknowledges his/her growth potential.

BOX 2 Summary of most frequently mentioned and notable learning outcomes of the CTP, expressed by the participants at the end of the training year and observed outcomes as most frequently mentioned by students.

PARTICIPANTS' PERSPECTIVE

Theory, reflection, and discussions

The conceptualisation of coaching, apart from mentoring
Design of the coaching alliance
The power of separation of cognitions, feelings, and emotions
Models and their application in coaching: T-Grow model, rational emotive therapy model, deep democracy model
Levels of communication, the undercurrent

Skills

To contact the student
To focus on the strengths, talents, and values of the student
Encouragement of students to do more self-examination and exploration of their questions themselves; to refrain from giving advice or solutions
To ask powerful questions
To use both distance and proximity
To alternate between being in the lead and following the student
To stimulate students to take responsibility for their actions and behaviour
To switch between overt patterns of behaviour and the undercurrent
To connect the student's behaviour during the conversation to the questions raised
To admit more discomfort during the coaching session and address student's emotions
Awareness of limits of coaching students and specific reference to other professionals (such as the professional study adviser) more often when needed
To end a coaching session with clarity for the student on the concrete steps the student is going to take
To distance from advice or transferring knowledge as a research or medical professional and to maintain boundaries as a coach of the student instead of being a healthcare professional to the students
To pick up signals of seemingly unremarkable experiences of the students that can be the key to valuable coaching sessions

STUDENTS' PERSPECTIVE

Skills improvement

Better listening to students
Forcing students to reflect on the questions they raised
Sharing observed non-verbal communication
Asking open questions
Allowing uncomfortable emotions and situations

Stimulating students to take responsibility
 Giving advice less frequently
 More clarification of what the teacher expects from the student
 Assurance of a safer learning climate in which students feel more comfortable talking about personal issues
 Adding more structure to the individual coaching session
 Unexpected valuable coaching sessions, although the student a priori thought there was nothing to discuss

3.3 | Students' responses

A total of 144 students coached by a non-participating teacher and 85 students coached by a participant in the CTP completed the questionnaire about their teacher's coaching skills. The main change observed by students is the increased effectivity of the coaching role of teachers who participated in CTP. Students felt that they were effectively coached in discovering their potential and the path to achieving it. Coaches teach students to take more responsibility, ask open-ended questions more often, stay away more often from giving advice, avoid discomfort, share direct observations more often, and give more structure to coaching conversations. Figure 3 presents examples of the questionnaire results that support this observation. All data are available on request. The students' and participants' perspectives on the effects of the CTP on coaching skill improvement are summarised in Box 2.

Students recognised the extended skills of the trained teacher, especially the emphasis on open, inviting questions and stimulating the students to take responsibility for their development and explore their qualities and capabilities.

BOX 3 Quotes of the participants' narrative feedback at the end of the CTP (published with permission).

'I have learned that asking uncomfortable questions, no matter how awkward it may be, can sometimes lead to the clarification of the problem, and it often triggers deeper thinking on the part of the student'.

'How I would have liked to have had a coach during my studies! How wonderful that we can offer that to today's students at our faculty!'

'After the coach training, it is easier to work from the students' agenda and to leave my own ideas and judgments behind'.

'I have gained a huge toolbox, full of possibilities. Thank you for this gift, both to the students and to myself'.

'It is really beautiful that the student discovers his/her affordances, is allowed to be himself/herself, and acknowledges his/her growth potential'.

'I now have a better understanding of what coaching is all about. This allows me to be calmer during the coaching sessions, both on a literal and figurative level'.

'I thought I was coaching but now I realise that I was listing problems and solving them like a consultant'.

4 | IMPLICATIONS

The aim of this initiative was to reframe the mindset and encourage the training of coaching skills, using a clear definition and framework of coaching in order to benefit our learners. The evaluation shows us the importance and added value of a CTP, resulting in improved student-coach consultations. After training, it appeared that teachers were more aware of and better able to encourage students to unlock their potential. Students (who were not informed about the CTP of their coaches) recognised the extended skills of the trained teacher, especially the emphasis on open, inviting questions and stimulating the students to take responsibility for their development and explore their qualities and capabilities. Therefore, we now offer the CTP to all teachers participating in the professional development programme for students.

Evaluation also identifies areas for improvement. We decided to pay even more attention to individual sessions as participants being coached, as a more than expected valuable learning activity. Participants expressed the need for more attention to group dynamics and group coaching in order to further stimulate the self-directedness and collaborative learning of students. An improved alignment of the CTP programme with the academic year is necessary to optimise the

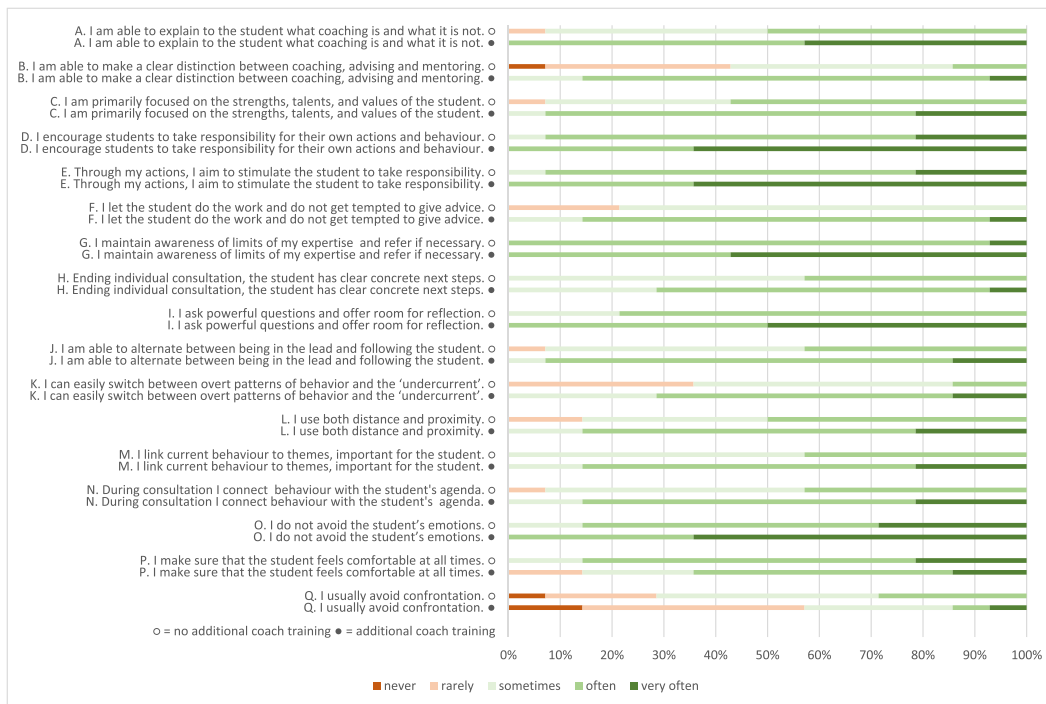


FIGURE 2 Participant perspective in a before-after design. A selection of items (A–Q) of the participants’ questionnaire: Responses before (○) and after (●) the CTP (n = 16 participants). Responses are categorised on a five-point Likert Scale (■ never, ■ rarely, ■ sometimes, ■ often, ■ very often) and are visualised in percentages. The complete questionnaire is available from the corresponding author upon request.

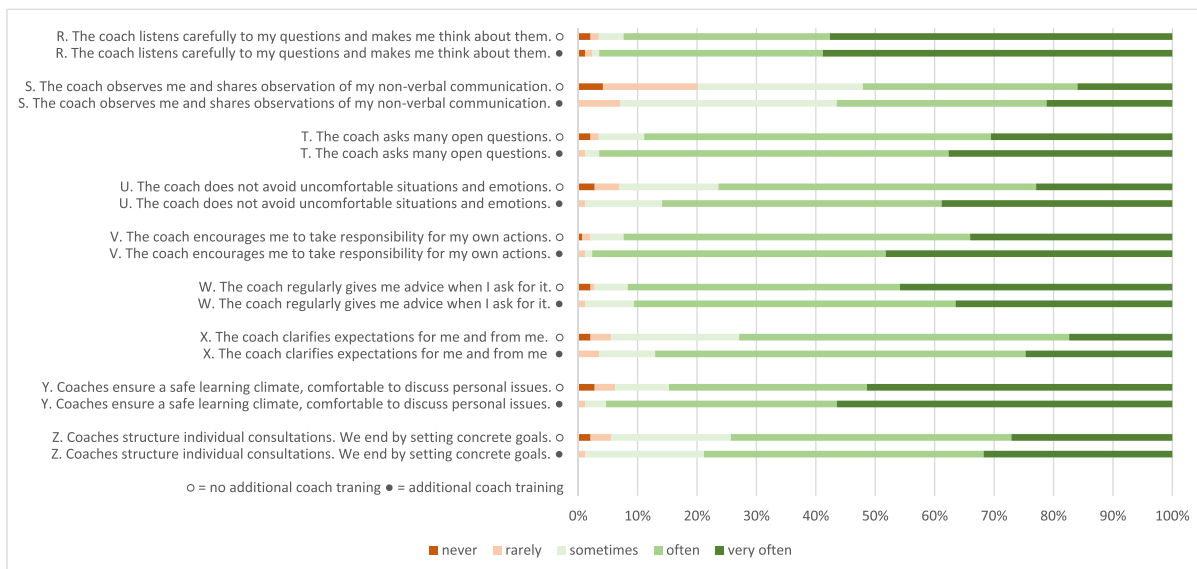


FIGURE 3 Student perspective of the level of coaching skills of both participants of the CTP and traditional teachers. A selection of items (R–Z) of the students’ questionnaire: Observations both from students guided by a traditional teacher (n = 144, ○) and students guided by a teacher who completed the CTP (n = 85, ●). Observations are categorised on a five-point Likert Scale (■ never, ■ rarely, ■ sometimes, ■ often, ■ very often) and are visualised in percentages. The complete questionnaire is available from the corresponding author upon request.

possibilities for practising in student-coach consultations what participants learned (just-in-time learning). Our evaluation affirmed for us the importance of a theoretical base, skills training combined with practical exercises, the longitudinal modular character of the programme, and the rhythm of modules intertwined with time for authentic practice.

The importance of a theoretical base, skills training combined with practical exercises, and the rhythm of modules intertwined with time for authentic practice.

The 'learning yield' of this innovation was significant for our institution, with an impact on learners and teachers that will hopefully continue to develop in the coming years. We now realise that, for their specific role, better prepared teachers can make a difference for the professional development of our students. We could expand future evaluations by incorporating blinded observations by trainers. This could give us a new perspective on the evaluation that could help us improve the training programme. We could consider whether participation in this one training course will be sufficient for the teacher or whether subsequent training modules are necessary to maintain the intended coaching level and expand to a more advanced level in the future.

The need for a different way of supporting and encouraging lifelong learning is generic and cross-curricular. This innovation offers a new recipe for training teaching staff. So other disciplines than (bio) medical sciences and/or other levels of supervision, such as residents, might benefit from our study. The literature has given frequent attention to the intention (why), profile (who), and yield to be achieved (what) of mentorship.¹⁰⁻¹² The how and teachers' skills have been underemphasised. This is remarkable, as the role of the teacher is pivotal in the process of professional development (e.g., self-directed learning, self-regulation, and resilience) in times of uncertainty, change, and growing emphasis on diversity and inclusion. Attention to professional development and growth, rather than recognition of behaviour that does not fit our professional standard, is increasing.¹³

The need for a different way of supporting and encouraging lifelong learning is generic and cross-curricular.

For the use of such training in a new learning environment, we recommend that the content and format of this training be aligned with one's own curriculum and/or authentic practice. We also recommend that teachers receive training in coaching skills much earlier, immediately upon starting their jobs.

The role of the teacher is pivotal in the process of professional development (e.g., self-directed learning, self-regulation, and resilience) in times of uncertainty, change, and growing emphasis on diversity and inclusion.

As a skill, coaching aims to develop one's potential and provide room for diversity. It matches the essence of good learning (transformative, active, interactive, intrinsically motivating, and lifelong).¹⁴ Coaching facilitates students becoming lifelong learners and flexible and resilient professionals of the future by stimulating them to reflect, direct, and guide themselves.¹⁵ This resonates with Maini et al., who stressed the need for skillsets to manage the personal and emotional challenges of work and the uncertainty and change in one's life.¹⁶ Our approach demonstrates the potential for faculty training in coaching skills and its contribution to students' professional development as well as to the professionals themselves. Long-term experiences with coaching in professional development could be studied in the future.

Coaching facilitates students becoming lifelong learners and flexible and resilient professionals of the future by stimulating them to reflect, direct, and guide themselves.

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CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

ETHICAL APPROVAL

This study was approved by the Research Medical Ethics Committee (CMO) of the Radboud University Medical Centre (case number: 2020_6518).

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