

Team learning at work

Citation for published version (APA):

Meeuwissen, S. N. E. (2021). *Team learning at work: Getting the best out of interdisciplinary teacher teams and leaders*. [Doctoral Thesis, Maastricht University]. Ipskamp.
<https://doi.org/10.26481/dis.20211112sm>

Document status and date:

Published: 01/01/2021

DOI:

[10.26481/dis.20211112sm](https://doi.org/10.26481/dis.20211112sm)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.umlib.nl/taverne-license

Take down policy

If you believe that this document breaches copyright please contact us at:

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

CHAPTER 9 Impact paragraph

In this chapter, we will first summarise our conclusions and then describe the impact of our studies on research, education, management and society. We will consider the return on investment in the short and long term from the knowledge gained during this PhD trajectory.

Research summary

The aim of this dissertation was to shed light on: 1) the processes that occur within interdisciplinary teacher teams, 2) the factors that influence these processes, and 3) how to move these teams forward to enhance high-quality, integrated health professions education (HPE). Integrated HPE means that students, rather than studying disciplinary knowledge (e.g. anatomy, physiology), learn about problems that reflect clinical practice. We studied teams responsible for integrated education through the lens of *team learning*. Team learning is about the interaction taking place in a team, and describes the behaviours team members exhibit in their efforts to understand and integrate each other's knowledge and experiences.¹⁻³

We investigated how interdisciplinary teacher teams, comprising teachers from a variety of backgrounds (e.g. clinical, basic and social sciences), share, explain and exchange knowledge between colleagues when working on integrated education. We identified three team approaches with varying levels of team learning; the teams that demonstrated high levels of team learning produced the best educational quality as perceived by students. However, we found that, for team learning to occur, teacher attributes must be aligned with the institution's prevailing educational philosophy. On the team level, a shared vision, shared responsibility and reflection on team processes and the course product appeared crucial. The organisation should involve teachers in decision-making, offer educational support and faculty development opportunities, and establish both a culture and structure supportive of teamwork.

We also highlighted the importance of team leadership to interdisciplinary teacher teams. A longitudinal study that followed a successful team for over a year unravelled the specific leader behaviours that made team members feel included and engaged, by actively welcoming and inviting people from diverse backgrounds. We translated these innovative lessons learnt into a new faculty development programme that aimed to optimise leadership in interdisciplinary teacher teams. This programme broadened team leaders' perspectives on leadership to reflect optimal team functioning. More specifically, we demonstrated how a faculty development programme can convert teachers' classic views on leadership that traditionally emphasise personal dominance into views that recognise the importance of social interactions and relationships. Since these views can develop across team leader's

individual careers, long-term investments in leadership are needed. Therefore, support from higher education management is vital.

Scientific and societal relevance

This dissertation investigates how teams function in HPE. Team learning proved to be a robust construct for the study of interdisciplinary teacher teams. We found that the way teachers work together in daily practice influences the quality of education offered to students. Team approaches may therefore impact the development of future health professionals. We were also the first to study leader inclusiveness behaviour in the educational team setting and provided novel suggestions on leader behaviour, faculty development and organisational contributions to teacher teams. The impact of this dissertation is not restricted to research on teams in HPE, but may be relevant to many other research domains including management and healthcare. Our work builds on previous research on educational change⁴ and quality cultures in HPE⁵ that recommended a focus on educational teams and leaders. Our results might inform management and directors of the individual, team and organisational factors that should be considered when trying to establish successful interdisciplinary teacher teams, which ultimately leads to high-quality integrated education. More specifically, we propose that these institutional leaders shift their primary focus on curriculum contents towards aligning teachers' views with the educational philosophy, shared decision-making in teams, and developing leadership in the organisation.

The team leaders who participated in the leadership programme could set an example to the teams they are part of. In this way, the intervention might effect behavioural changes in staff that trickle down to their colleagues and students. This is beneficial since safe, open and inviting environments are also needed outside the realm of education.⁶

Target groups

First, the results are directed towards **faculty** who work in interdisciplinary teacher teams and their **team leaders**. All should be aware that, for their team to be successful, they must move beyond traditional, disciplinary silos and start to invite, understand and integrate each other's perspectives, embracing the philosophy of integrated education. As a result, they will be more satisfied with their teamwork and raise the quality of their courses.

Second, our results target **policymakers, deans and boards, including human resources managers**, who can set up and emphasise policies that value

interdisciplinary teams, create opportunities for staff to learn more about integrated education, teamwork and leadership, and involve teachers in educational management and team composition. Additionally, offering rewards for teaching, creating opportunities to learn about teamwork and leadership, and providing a work environment where teachers feel safe to speak up and get involved is critical to optimise team behaviours.

Third, such involvement and supportive work environments can also be facilitated by **educational management, including programme directors, and curriculum designers**. In general, they should pay more attention to the social processes that are vital in the successful implementation of integrated HPE.

Fourth, the findings could be transferred to **students**. Some students act as student representatives in teacher teams and our dissertation might help them to understand social processes and offer the opportunity to learn new approaches to teamwork and leadership. This could aid their work readiness, because they need the capabilities thus acquired in their later work role.⁷ The student body also benefits from high-quality education produced by well-functioning teacher teams.

Lastly, **team researchers** in and outside HPE could use our findings to study how team learning develops over time, what incentivises staff to engage in understanding their fellows' knowledge and how they can learn from their fellows during work in interdisciplinary teams.

Scientific activities

The above listed target groups can access our findings via **published open-access** manuscripts (Chapters 2-5). We introduced the concept of team learning to the HPE field and showed the importance of social interactions at a team level.

Many of the target groups have already been alerted to our findings at local, national and international **conferences and departmental meetings**, such as the School of Health Professions Education (SHE) Special Interest Groups, the 2017, 2019 and 2021 SHE Academies, the 2017-2019 Netherlands Association for Medical Education (NVMO) conferences, the Rogano 2017 meeting, the 2019 Higher Education Conference, the 2019 Conference of the Association for Medical Education in Europe, the 2019 and 2021 International Faculty Development in the Health Professions Conference and the 2020 American Educational Research Association Annual Meeting. We offered workshops to faculty, deans and educational directors at the 2020 annual conference of the Dutch Association of Medical Specialists [*Federatie Medisch Specialisten*], in which we explained how to work across disciplines in a constructive and inviting way. We also disseminated our

findings by means of lectures to the business department in 2017 and 2019 as well as to the HPE department in 2019 and 2020.

Furthermore, **academic conversations and presentations** during my virtual stay at the Institute of Health Sciences Education, McGill University, Montreal, brought our findings to the attention of a Canadian HPE audience. This stay, which brought together various experts and perspectives, also created new scientific opportunities for the future to regard learning as a social process.

Lastly, I **contributed to other scientific research**, for instance on trainees' learning climate and social cohesion in hospital teams. I used gained knowledge and experiences on teams and collaboration.

Societal activities

I shared many of the above activities on **social media**, thereby contributing to science communication for a wide, global audience. Moreover, I **implemented** many of our findings **in education** offered at the Faculty of Health, Medicine and Life Sciences, Maastricht University (UM). For example, in my capacity as planning group member of the Master of Health Professions Education (MHPE) 'Change Management and Leadership' unit and, specifically, as a member of the working group in the new MHPE Leader profile, I used the knowledge gained from this PhD project as a tool to understand and reflect on our masters students' work. Informed by our findings, I designed various learning tasks for the new Leader profile. Also, the new leadership programme for course coordinators included findings and recommendations from Chapters 2-5.

Apart from the above, I also contributed to **education** at a **university and national level**. Team dynamics were also the topic of invited workshops for a group of medical student representatives and a so-called 'Student-Meet' organised by EDLAB, the Maastricht University institute for education innovation. In addition to this, I shared our outcomes with the UM Staff Career Centre which is offering staff opportunities to develop leadership qualities. In the future, access to our findings could be enhanced by including the topic of interdisciplinary team learning in the University Teaching Qualification. Moreover, the results of this dissertation could inform university policies in such a way that they involve faculty in team compositions and educational management and invest in a culture and structure that are supportive of interdisciplinary teamwork. Next, I contributed to the development of the new national blueprint for future medical doctors, with particular reference to the 'Leadership' competence.

Lastly, since I personally embrace the importance of speaking up and team learning, I

tried to **put this into action** by co-initiating the SHE PhD journal club, representing SHE PhD students, and co-organising the Rogano meeting - platforms aiming to invite PhDs to share and build upon each other's questions, experiences and knowledge. Moreover, I was a member of the Maastricht University Medical Centre+ research committee for two years, sharing my knowledge of and perspectives on qualitative research. During that time, I was also the secretary to the 'Dokters in Debat' foundation, which aims to help medical doctors in speaking up in public debate. In 2020, I won the NVMO Marijke Sterman Award for societal engagement and connecting people both within and outside research.

In the future, I aim to stay involved in scholarly work on teams, leadership, faculty development and organisational culture and instil findings to the best of my ability.

References

1. Van den Bossche P, Gijselaers W, Segers M, Woltjer G, Kirschner P. Team learning: building shared mental models. *Instr Sci.* 2011;39(3):283-301.
2. Edmondson AC, Dillon JR, Roloff KS. Three perspectives on team learning. *Acad Manag Ann.* 2007;1(1):269-314.
3. Edmondson AC. Psychological safety and learning behavior in work teams. *Adm Sci Q.* 1999;44(2):350-383.
4. Velthuis F. *Unraveling the complexities of enacting change in undergraduate medical curricula.* Groningen: Rijksuniversiteit Groningen; 2019.
5. Bendermacher GWG. *Navigating from Quality Management to Quality Culture.* Maastricht, Maastricht University; 2021.
6. Atherley A, Meeuwissen SNE. Time for change: Overcoming perpetual feelings of inadequacy and silenced struggles in medicine. *Med Educ.* 2020;54(2):92-94.
7. Ellis PM, Wilkinson TJ, Hu WC. Differences between medical school and PGY1 learning outcomes: An explanation for new graduates not being "work ready"? *Med Teach.* 2020;42(9):1043-1050.