

Team reflexivity and the shared mind in interprofessional learning

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Abstract

In interprofessional (IP) workplace education, course and project leaders need a deeper understanding of how students learn. Basically, in IP workplace learning students learn from each other, from the affected agents (patients, clients, children, youth, or elderly), from the staff, and from using multitudes of artifacts. Most of these interpersonal processes are largely tacit, and we therefore decided on elucidating their possible parts in IP learning theoretically, focusing on central interpersonal aspects of team learning processes; team reflexivity and intersubjectivity. Consequently, our study aim was to elucidate possible associations between team reflexivity and the shared mind when students in the IP team interact within each other, with the people and with the artifacts around them. In this article we investigate, elaborate, and conceptualize relevant social theories which address aspects of team reflexivity and intersubjective activities. We will then elaborate and conceptualize consequences for increased understanding IP team learning. Based on our mutual libraries, we have searched in PubMed and Google Scholar for team reflexivity, intersubjectivity, shared mind and their combinations. We came to understand reflexivity and team reflexivity as mostly tacit activities which may be regarded as being interpersonal and self-pacing. Intersubjectivity is however based on the free interaction between minds, orchestrating each other with common ideas, thoughts, attitudes, and bodily actions. Intersubjectivity is created when team members' verbal and non-verbal activities resonate, giving a shared feeling of developing mutual and common ideas, concepts, and understanding. Team reflexivity, and intersubjectivity are necessary aspects in understanding the learning processes in IP student teams, and we have sketched some consequences for IP course design.

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Background

Interprofessional (IP) or interdisciplinary collaboration can be more productive and effective than the sum of its parts, resulting in more innovative research. IP collaboration is central in achieving the quadruple aim of healthcare: enhancing patient experience, improving population health, reducing costs, and care for the provider (Bodenheimer & Sinsky, 2014). World Health Organization (2010) argued for IP work in the health services to increase patient safety. The Interprofessional Education Collaborative (2011) suggested four main domains for IP collaboration: 1) values/ethics, 2) roles/responsibilities, 3) IP communication, and 4) team and teamwork. To achieve goals of high-quality IP collaboration, continuous development of IP competencies and capabilities as part of the learning process is key.

Although basic communication skills are a common area in health professionals' education, we have limited knowledge regarding effective IP communication and learning (Bondevik et al., 2015).

A systematic review of the literature reported that while barriers to implementing IP team education in higher education are widely reported within literature, little is documented about the enablers (Lawlis et al., 2014). It is commonly understood that due to the diversity of stakeholders, facilitating change in the pedagogical approach can be challenging and complex and easily results in uncertainty and resistance. The identification of enablers, however, is critical to achieving sustainable IP work. Furthermore, the review identified enablers at three levels: governments, institutions, and personal, coupled to eight personal enablers: 1) skill of the facilitator, 2) enthusiasm of facilitator/staff, 3) staff as role models, 4), champions, 5) commitment, 6) understanding of IP work and collaborative practice, 7) shared IP vision, and 8) showing of equal status regardless of position or background. These enablers clearly point us in the direction of team reflexivity and shared thinking. Crucial conditions for this are personal motivation, engagement, and willingness to engage with contradictions so that intersubjective processes can occur.

According to Opie (2000), an effective team is one that attends to and works with the unique knowledge of clients, encouraging discipline-specific accounts and narratives of clients and families (which may also be unique).

The work of the team requires engagement with such differences (rather than their eliding) to ensure, as clients' circumstances evolve, the continued elaboration and revision of team goals and care plans. The ongoing development of effective work will focus primarily on evaluations of teams' processes of knowledge production and creation. (Opie, 2000: 51, p. 51)

This quote suggests that ongoing reflexivity is necessary for the individual team members, attuning to the potential polyphony that can occur when opening collective accounts. This study indicates a connectedness between personal interest in the form of engagement to an orchestration of accounts and narratives, and reflexivity is needed to continuously elaborate and revise goals and plans.

Less attention is given to team reflexivity as a basic requirement for productive teamwork where intersubjectivity is created in resonance between the team members' mental activities. How communication is enacted will be influenced by the emotions of the team members and be stimulated by elements of contradictions stemming from their different individual standpoints.

Rogers et al. (2017) have described seven necessary aspects of IP teamwork; one of which is reflexivity. Team functioning is interactive, and any view on team learning must incorporate the dynamics and consequences of the interaction, which too often is overlooked (Fuchs and De Jaegher, 2009).

As the IP team interact, every participating subject is an interacting part of the group, and a group perspective on learning is embedded in space and time (De Jaegher, 2018). The learning students interact with each other with their mind, eyes, hands, face, etc. in their historic-social surroundings and with artifacts in their physical space. The bodily interaction supports verbal communication and is necessary for building mutual empathy. We thereby define social cognition as encompassing mind, body, and physical and social surroundings, and being embodied, intercorporated, and embedded in the teams (Fuchs and De Jaegher, 2009; Kiverstein, 2018).

Learning will then be the result from dynamic interaction between minds, bodies, and the physical and cultural-historical surroundings (Kiverstein, 2018). Bakhtin (1986) describes dialogues as “speech genres” (p. 65). Every group of people or professionals has their own distinct vocabulary and ways of talking; therefore, the way they use certain language, or their body could vary. Dialogism is furthermore practice-oriented, as an ongoing process of negotiation between people and contexts (Linell, 1998). Ultimately, Bakhtin believed that meaning emerged from the interplay of voices, which points to dialogical interchange as a learning potential for IP teams. Bakhtin (1986) claimed that these speech genres are not totally apart from each other; instead, they interact with each other and help us create meaning. A dialogical approach will promote reflexivity in IP teams, as pointed out by Thille et al. (2018), by enhancing resistance to the assumption that in a clinical (or research) perspective there is a singular or right view. For an IP team of health and social students, the hypercomplex situation for clients in the health and social services may provide the necessary resistance also due to the different perspectives and voices in the teams.

In this study we aim to investigate, elaborate, and conceptualize the association between team reflexivity and the shared mind when students interact within the team, with the people, and with the artifacts at the workplace, all of which are dialogically intertwined with cultural-historical premises and accordingly we position ourselves within a cultural-historical theoretical tradition.

Methodological considerations

In this article we investigate, elaborate, and conceptualize relevant social theories which apply to aspects of team reflexivity and intersubjective activities. We will further elaborate consequences for understanding IP team learning. Based on our mutual libraries, we have searched in PubMed and Google Scholar for team reflexivity, intersubjectivity, shared mind and their combinations.

There are several definitions of reflexivity. In this study, however, we follow Archer's (2007) definition because she anchors the concept in the individual and present it in the social space: *reflexivity is the regular exercise of the mental ability, shared by all normal people, to consider themselves in relation to their (social) context and vice versa* (Archer, 2007: p. 4). Reflexivity always includes the *self* in interchange with the others in the same social system; it is instant and mostly tacit.

Based on differences in the internal dialogues derived from empirical material, Archer (2007, 2012) postulates four different modes of reflexivity. Each individual usually has one predominating reflexive mode but may use different modes depending on the social context: a) *fractured reflexivity* is a non-working reflexivity resulting from and inducing distress, anger, and hyperactivity; b) *communicative reflexivity* is typical in closed social communities where social rules are predominant and available actions are socially pre-controlled, for example small villages or operation theaters

(health services); c) *autonomous reflexivity* is when the individual relies on herself/himself and becomes self-directed. This mode of reflexivity is necessary in lifelong learning; and d) *meta-reflexivity* includes all team members as well as all their surroundings and is the most valid mode for describing reflexivity in IP student teams.

We have previously discussed how individual reflexivity may come together in team reflexivity (Baerheim and Ness, 2021); when an IP team works together on a care plan for a patient, each participant will, in dialogue with the others, propose aspects that may be elaborated. Thereby, each individual's inner professional and private dialogues will mingle with the others, creating team reflexivity.

Team reflexivity

There are many aspects and definitions of team reflexivity. For instance, Schippers et al. (2018) referring to West (1996) pictures team reflexivity as a conscious, intended teamwork involving verbal reflection on action, while our definition above describes a mostly tacit process of interaction or reflection-in-action as Schön (1983) might have put it. Reflection-in-action may be viewed in line with reflexivity. Lyubovnikova, Legood, Turner, et al. (2017) showed how authentic team leadership, defined as self-awareness and self-regulation, may inspire similar aspects of team performance, a process onto which we have above added ontological aspects by addressing team reflexivity. Almost all research on team reflexivity seems motivated by its innovative power (Widmer et al., 2009), and Pieterse et al. (2011) claimed that the innovative power increases by diversity of the team.

We have earlier discussed how team reflexivity may stem from the team members ongoing reflexive activity (Baerheim and Ness, 2021), and above we have described how reflexivity is basically enacted. This enactment of the inner dialogue is directed toward the *you*/the other team members, and if this is mutual, these different dialogues will interact. As the IP team works on their task, their different professional dialogues blend, contributing to the elucidation and clarifying of their task from each of their professional angles. Their reflexive processes blend, forming team reflexivity. The students' interaction by their learning activity is not only verbal. It is embodied and incorporated as bodily movements of all kinds interact and is embedded in the concrete physical, temporal, and social situation where it happens (De Jaegher, 2018). These processes are at play by the students' team learning, and the team reflexivity may drive the learning processes forward.

Below we will pursue how the blending of these interacting mental and self-reflexive processes may be analyzed further applying conceptual aspects of intersubjectivity.

Intersubjectivity

An inclusive definition of intersubjectivity is given by Gillespie and Cornish. Intersubjectivity may be defined

as the variety of relations between perspectives. Those perspectives can belong to individuals, groups, or traditions and discourses, and they can manifest as both implicit (or taken for granted) and explicit (or reflected upon) (Gillespie and Cornish, 2010: 20).

Intersubjectivity may best be described as a basic human capacity. In the last four decades, several studies have resulted in a paradigmatic shift concerning understanding the nature of human capacities in terms of interpretation of others' minds from early infancy onwards. The discovery of

“mirror neurons” in the primate brain, including humans, indicates the presence of reciprocal interaction and understanding. Trevarthen (1979) conceptualized the first sign of reciprocity for *primary intersubjectivity*. This finding is in line with studies that included newborns where altercentricity was discovered. Bråten (2009) describes the very early steps of children from neonatal imitation to conversation and mindreading, which he, with reference to Trevarthen, calls *intersubjectivity*. Infants appear to be able to feel when they are moving with other movements. For example, when infants cling to the mothers’ neck, they not only move along with her movements but also usually adjust the head and the gaze in the same direction as the mother. Since the discovery of mirror neurons, imitation has been understood as the basis of the mirror metaphor or an automatic simulation of others’ behaviors. Even if “mirror neurons” can implicate that the sensory-motor system is already set to be coordinated with other experiences, Bråten (2009) argues that there needs to be some kind of critical sensitizing nurture during the first weeks of life to evoke alter-centric participation and exchange, which indicates that the development of intersubjectivity in humans does not follow a universal and automatic path, rather is triggered and formed in cultural dialogues and endeavors. What these theories underline is that imitation is not only a copying capacity but also a source of innovation, because imitation allows individuals to connect and build intersubjectivity in efforts to embody what other individuals feel, think, and express.

Rochat and Ferreira (2008) suggest that the mirror metaphor should be replaced by the dynamic, open-ended, and relational concept of reciprocation, which was supported by an empirical study they conducted including children aged 3–5 years from highly contrasting cultures. The study suggested that there is a leap from 3 to 5 years of age, and the children showed an increasing awareness to fairness and understanding of the discrimination of right and wrong according to their local culture. Even if this process starts from birth via imitation, relational embodiment, and mirror processes, this observational and imitative learning will be selective and more or less intentional. Imitational learning is an important ground for sociality as they provide a basic sensitivity of relations to others. What is at stake following this line of thinking is the elaboration of content that will not just occur by accident but will rather be co-created.

Taking a large leap from the research on the early development and human sign of reciprocal social exchanges that include imitation and embodied responsiveness, professional intersubjectivity will include negotiation based on which meanings, values, and norms are eventually built and co-created with others (Eriksen Ødegaard, 2020: 83–105).

Based on the review of methodological approaches in studies of intersubjectivity, Gillespie and Cornish (2010) found a variety of methods that are useful in relation to a different sort of question and conceptualization of intersubjectivity. They argued that since contemporary societies are characterized by a great diversity of perspectives interacting and that the structural differentiation of society sustains a diversity of social positions within society, dialogism provides a promising set of analytic tools to analyze perspective-taking in groups.

This line of understanding intersubjectivity was also proposed by Matusov (2020), with reference to Trevarthen and Bakhtin. Matusov states that intersubjectivity is a *social* pattern of behavior involving subjectivity. The intersubjective pattern can be based on different types of behavioral coordination among individuals where people being together coordinate themselves as one follows the other’s outlook by trying to see what the other sees.

Intersubjectivity is either immediate or mediated. While immediate intersubjectivity can occur in a present moment, the latter can involve shared beliefs or individual coordinated calculations. Intersubjectivity does not only coordinate people but can also create a new socially constructed reality. He explains this by the use and understanding of money as being based on intersubjectivity. Money has no objective value as you cannot eat, drink or wear a coin or a dollar bill. Yet, as long as

most people believe in its value, you can use it to buy food, beverages, and clothing (Matusov, 2020).

An interesting aspect of Matusov's outline of intersubjectivity is that it can create powerful "psychological affordances" when a particular pattern of the environment or a particular situation forces an individual's actions even despite their will. Following this line of thought, intersubjectivity is merely a conceptualization of moments of relational coordination, and the content of the social pattern is constructed and, therefore, not neutral. As a consequence, such relational sameness or coordination can reinforce one another in self-preserving loops. As articulated by Matusov: *Each round of mutual confirmation tightens the web of meaning further until you have little choice but to believe what everyone else believes.* (Matusov, 2020: 15). The importance of this aspect of intersubjectivity is not only seen in political conspiracy activities but also for any dominant view (e.g., medical) in health and social students' teams, eventually leading to unintended directions or a standstill.

With the above outline of intersubjectivity, we are reminded that shared thinking can entail a common ground and mutual understanding valuable for IP teams. However, as forward from Matusov, there is a risk for hegemonic idea systems to dominate the IP interchange. A remedy is to prepare students for their future workplaces that require standards and mental templates to act correctly in some objective way and to carry out successful practices. Additionally, productive for our present study is the findings from intersubjectivity in human infants. We, therefore, bring forward a promise of the innovative aspect of intersubjectivity.

Dialogue in interdisciplinary teams—the necessity of intersubjectivity

In IP teams, there will be dialogues and several voices representing different opinions, diverse educations, and mindsets coming together to compete, support, and oppose each other. A complex dialogue with many voices is influenced by competing perspectives and views, which is a centrifugal force. However, in order to move forward with the dialogue and have a constructive conversation, there is a strong need for the opposite or the centripetal movement for unification (Bakhtin, 1981: 271).

Any fruitful dialogue must have a balance between what divides in order to think new with different views challenging each other on the one hand and what unifies and brings a shared understanding in order to have progression on the other hand (Ness and Søreide, 2014).

In a productive dialogue, parties understand each other and manage to take the other's perspectives and achieve a mutual understanding. This process of shared understanding can be placed within the concept of intersubjectivity (Linell, 2009). We all have an urge to achieve a shared understanding, and intersubjectivity is therefore found at different levels, from microprocesses in human interaction to traditions and discourses as they manifest themselves as both implicit and explicit (Gillespie and Cornish, 2010).

In conclusion, after elaborating how reflexivity and team reflexivity coordinate and drive activity, we may argue that intersubjectivity partly stems from the same activity, adding layers of feelings, meanings, values, and norms that result from mutual negotiations and co-creating. In IP teams, the different professional and personal standpoints of the team members may frequently give rise to contradictions, stimulating further negotiations.

Team reflexivity and intersubjectivity in IP learning

Interaction between team members is the foundation for team learning, encompassing affective affordances, bodily resonance, and coordination of vocal, facial, and corporal expressions. As previously indicated, this gives the necessary extension to also include bodily interaction and the importance of equal focus on all participating subjects to Archer's (2012) definition of reflexivity; this extension is team reflexivity (Baerheim and Ness, 2021).

Interacting verbally and bodily leads to social team cognition that develops within the provided cultural frames, and for health and social students' team, the well-being of the patient/user is their central common task. Social knowledge arises from moment-to-moment interaction between team members (Fuchs and De Jaegher, 2009), and all members of the team bring forth different yet relevant pieces of theoretical and working knowledge to interact with each other. As these elaborations start to move in resonance, intersubjectivity develops, thus stimulating further work.

Intersubjectivity among team members is enacted by verbal dialogues and embodied non-verbal interactions. While team reflexivity results from the team's mostly tacit internal dialogical activity, which is an acting quality of team interaction, intersubjectivity is the team members embodied mental interactions, creating mutual feelings, understanding, meaning, and values, that is, the shared mind. This mutually created meaning reflects the team's learning process, being situated, and embodied as it is being developed by the interactions between the team members' minds and bodies which interact in the physical and social surroundings.

Furthermore, these processes will be stimulated by diversity among team members. Some interactions may bring forth mental and physical resonance and probably more well-being than learning. Other interactions may develop tensions due to the team members' different knowledge, attitudes, or professional identity, thereby stimulating the team members to negotiate their contradictions. Their main task is not to solve the contradictions, but to transform them into new knowledge (Engeström, 2015). As more diversity increases the team's innovative power, we also assume that contradictions will stimulate learning and innovations, which is likely to increase if adding more diversity to the team (Laing and Bacevice, 2013).

As indicated above, we have developed and extended the concepts of team reflexivity and intersubjectivity as the shared mind to elucidate the learning aspects of the IP students' team. We find that these two situated concepts provide a coherent picture of the learning process in IP teams and how co-working will move forward.

In addition, our investigations revealed emotions to be drivers for continuous reflexivity. We found research literature revealing enablers for IP work highlight shared vision and commitment (Lawlis et al., 2014). We also learned from infant studies that resistance needs to be nurtured and triggered during the first weeks of life. This suggests that intersubjectivity in humans does not follow a universal and automatic path but is continuously formed in cultural dialogues and endeavors (Bråten, 2009).

There may be several applications for IP course design from the above elucidations. First, the students should have a drive in their work in order to increase the force of team reflexivity and intersubjectivity. This may be attained by an engaging case, as a better care plan for a concrete nursing home resident. Learning is maximized when the students learn on their own and develop a learning community among themselves, and then propose their care recommendations in a meeting with the staff. For the two processes to develop in the student team, guiding or tutoring may be less beneficial, as these activities may stop or interfere with the interpersonal processes for the students. Experiences from the teamwork may be debriefed afterward. Further, the teamwork may be divided in clear subtasks, as establishing the team, interviewing the patient, writing a care plan, discussing

the care plan with the nursing home staff. After each completion of such subtasks, the pace of their learning activity may again rise, giving action for the interpersonal processes and thereby IP learning. And finally, the learning processes we have described are maximized by the rich milieu by workplace learning.

Our elucidations may require further research when the above applications are incorporated in practical course design. A wide range of assessment tool is available.

Conclusions

We have in this article described and developed two factors that are important for learning in IP teams: team reflexivity and intersubjectivity. Together they cover basic and dynamic activity, mutual and resonating mental processes, and embed resistance and contradictions which stimulate IP teams' learning and innovative potentials. The pragmatic external validity of our elucidations, however, depends on how course organizers of IP education implement our findings in their evaluations and planning. We have sketched some possibilities.

While reflexivity and team reflexivity mostly are tacit activities, intersubjectivity, on the contrary, is the interaction between shared minds, orchestrating each other with common ideas, thoughts, attitudes, or bodily actions. In IP teams, intersubjectivity is created when team members' verbal and non-verbal activities are in resonance, enabling a shared feeling of developing mutual and common ideas, concepts, and understanding.

At the same time, this orchestration involves provocations, new and unexpected ideas, narratives, and viewpoints. Therefore, team reflexivity and the shared mind can be challenging and rewarding simultaneously, promising innovative results of IP activity.

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References

- Archer MS (2007) *Making Our Way through the World: Human Reflexivity and Social Mobility*. Cambridge, UK: Cambridge University Press.
- Archer MS (2012) *The Reflexive Imperative in Late Modernity*. Cambridge, UK: Cambridge University Press.
- Baerheim A and Ness IJ (2021) Reflexivity and expansive learning theory in interprofessional workplace learning. *Journal of Interprofessional Care* 35: 878–883. DOI: [10.1080/13561820.2020.1826414](https://doi.org/10.1080/13561820.2020.1826414).
- Bakhtin MM (1981) Four essays. In: M Holquist (ed), *The Dialogic Imagination*. Austin, TX: University of Texas Press.

- Bakhtin MM (1986) *Speech genres and other late essays*. (McGee VW, Trans). Austin (ed). TX: University of Texas Press.
- Bodenheimer T and Sinsky C (2014) From triple to quadruple aim: Care of the patient requires care of the provider. *Annals of Family Medicine* 12(6): 573–576. DOI: [10.1370/afm.1713](https://doi.org/10.1370/afm.1713).
- Bondevik GT, Holst L, Haugland M, et al. (2015) Interprofessional workplace learning in primary care: Students from different health professions work in teams in real-life settings. *International Journal of Teaching and Learning in Higher Education* 27(2): 175–182. <https://www.isetl.org/ijtlhe/pdf/IJTLHE1954.pdf>
- Bråten S (2009) *The Intersubjective Mirror in Infant Learning and Evolution of Speech*. Amsterdam: John Benjamins. DOI: [10.1075/aicr.76](https://doi.org/10.1075/aicr.76).
- De Jaegher H (2018) The Intersubjective Turn. In: A Newen, L De Bruin and S Gallagher (eds), *The Oxford handbook of 4E cognition*. New York, NY: Oxford University Press, pp. 253–267.
- Engeström Y (2015) *Learning by Expanding: An Activity-Theoretical Approach to Developmental Research*. New York, NY: Cambridge University Press.
- Eriksen Ødegaard E (2020) Dialogical engagement and the co-creation of cultures of exploration. In: M Hedegaard and E Eriksen Ødegaard (eds), *Children's Exploration and Cultural Formation*. New York, NY: Springer open, pp. 83–104. DOI: [10.1007/978-3-030-36271-3_6](https://doi.org/10.1007/978-3-030-36271-3_6).
- Fuchs T and De Jaegher H (2009) Enactive intersubjectivity: Participatory sense-making and mutual incorporation. *Phenomenology and the Cognitive Sciences* 8(4): 465–486. DOI: [10.1007/s11097-009-9136-4](https://doi.org/10.1007/s11097-009-9136-4).
- Gillespie A and Cornish F (2010) Intersubjectivity: Towards a dialogical analysis. *Journal for the Theory of Social Behaviour* 40(1): 19–46. DOI: [10.1111/j.1468-5914.2009.00419.x](https://doi.org/10.1111/j.1468-5914.2009.00419.x).
- Interprofessional Education Collaborative (2011) *Core Competencies for Interprofessional Collaborative Practice: Report of an Expert Panel*. Washington, DC: Interprofessional Education Collaborative. https://www.aacom.org/docs/default-source/insideome/ccrpt05-10-11.pdf?sfvrsn=77937f97_2.
- Kiverstein J (2018). In: A Newen, L De Bruin and S Gallagher (eds), *Extended cognition The Oxford Handbook of 4E Cognition*. New York, NY: Oxford University Press, pp. 19–40.
- Laing A and Bacevice PA (2013) Using design to drive organizational performance and innovation in the corporate workplace: Implications for interprofessional environments. *Journal of Interprofessional Care* 27(Suppl 2): 37–45. DOI: [10.3109/13561820.2013.792043](https://doi.org/10.3109/13561820.2013.792043).
- Lawlis TR, Anson J and Greenfield D (2014) Barriers and enablers that influence sustainable interprofessional education: A literature review. *Journal of Interprofessional Care* 28(4): 305–310. DOI: [10.3109/13561820.2014.895977](https://doi.org/10.3109/13561820.2014.895977).
- Linell P (1998) *Approaching dialogue: Talk, interaction and contexts in dialogical perspectives*. Amsterdam: John Benjamins Publishing Company.
- Linell P (2009) *Rethinking Language, Mind, and World Dialogically*. Charlotte, NC: Information Age Publishing.
- Lyubovnikova J, Legood A, Turner N, et al. (2017) How authentic leadership influences team performance: The mediating role of team reflexivity. *Journal of Business Ethics* 141(1): 59–70. DOI: [10.1007/s10551-015-2692-3](https://doi.org/10.1007/s10551-015-2692-3).
- Matusov E (2020) Pattern-recognition, intersubjectivity, and dialogic meaning-making in education. *Dialogic Pedagogy* 8: E1–E23. DOI: [10.5195/dpj.2020.314](https://doi.org/10.5195/dpj.2020.314).
- Ness IJ and Søreide GE (2014) The room of opportunity: Understanding phases of creative knowledge processes in innovation. *Journal of Workplace Learning* 26(8): 545–560. DOI: [10.1108/JWL-10-2013-0077](https://doi.org/10.1108/JWL-10-2013-0077).
- Opie A (2000) *Thinking Teams/thinking Clients: Knowledge-Based Teamwork*. New York, NY: Columbia University Press.

- Pieterse AN, van Knippenberg D and van Ginkel WP (2011) Diversity in goal orientation, team reflexivity, and team performance. *Organizational Behavior and Human Decision Processes* 114(2): 153–164. DOI: [10.1016/j.obhdp.2010.11.003](https://doi.org/10.1016/j.obhdp.2010.11.003).
- Rochat P and Ferreira CP (2008) Homo negotiatus: Ontogeny of the unique ways humans own, share and reciprocate. In: S Itakura and K Fujita (eds), *Origins of the Social Mind (141-156)*. Tokyo: Springer.
- Rogers GD, Thistlethwaite JE, Anderson ES, et al. (2017) International consensus statement on the assessment of interprofessional learning outcomes. *Medical Teacher* 39(4): 347–359. DOI: [10.1080/0142159x.2017.1270441](https://doi.org/10.1080/0142159x.2017.1270441).
- Schippers MC, Edmondson AC and West MA (2018). In: L Argote and JM Levine (eds), *Team reflexivity Handbook of Group and Organizational Learning*. New York, NY: Oxford University Press.
- Schön DA (1983) *The Reflective Practitioner*. New York, NY: Basic Books.
- Thille P, Gibson BE, Abrams T, et al (2018) Enhancing the human dimensions of children’s neuromuscular care: Piloting a methodology for fostering team reflexivity. *Advances in Health Sciences Education: Theory and Practice* 23(5): 867–889. DOI: [10.1007/s10459-018-9834-1](https://doi.org/10.1007/s10459-018-9834-1).
- Trevarthen C (1979) Communication and cooperation in early infancy. A description of primary intersubjectivity. In: M Bullowa (ed), *Before Speech: The beginning of interpersonal communication*. London, UK: Cambridge University Press.
- West M (1996) *Reflexivity and work group effectiveness: A conceptual integration*. Chichester: John Wiley & Sons.
- Widmer PS, Schippers MC and West MA (2009) Recent developments in reflexivity research: A review. *Psychology of Everyday Activity* 2(2): 2–11. ISSN 1998–9970.
- World Health Organization (2010) *Framework for Action on Interprofessional Education and Collaborative Practice*. Geneva: World Health Organization.

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