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Integrating TA concepts into team meetings through micro-learning approaches

Abstract

Micro-learning within team meetings offers immediacy of knowledge application and integration into practice. As a pedagogical method micro-learning has grown within workplace settings through being able to deliver small amounts of knowledge often, that is relevant, upskilling and applicable directly into practice.

With more meetings happening in the workplace than ever before leveraging learning opportunities has never been more important. Learning opportunities have regularly been missed during team meetings due to competing priorities, information overload, lack of shared attention, divergent mental models and failure to identify learning needs.

This article covers one aspect of a PhD research project focused on learning in team meetings. Discussion are two transactional analysis concepts delivered as micro-learning topics within team meetings and applied into practice. The approach, findings and further considerations are presented.

Keywords: micro-learning, meetings, transactional analysis.

> Transactional analysis is a practical psychology of learning
> (Newton, 2016 p. 31)

Introduction

The research setting for the research project was a telecommunications company senior leadership team (SLT) embarking on strategic business change. The

company had experienced exponential growth over the preceding two years and was finding that the current executive meetings and processes weren't keeping up with business demands or providing clear oversight. Along with improving meeting practices, the Managing Director (company owner) wanted this project to focus on the planning required for leading change and creating a new operational structure.

The SLT agreed each meeting would be a combination of; activities to support learning, incorporation and reflection of new practices and developing a shared understanding for planning the strategic direction. The SLT roles included the company owner as Managing Director, and Managers for the Business Hub, Learning and Development, Finance, Operations, and Retail.

The micro-learning sessions were incorporated into the team meetings as short presentations with exercises to apply directly into practice. Appendix 1 provides the topics along with their relationship to the meeting practices, learning and application. Of the topics, it is two transactional analysis (TA) concepts, 1. Contracts (referred to as agreements) and 2. The competence curve, that are discussed in this article.

This article commences with a contextual overview of the literature in relation to learning in team meetings and micro-learning. This is followed by a brief outline of the TA concepts delivered and findings through highlighting exerpts from the TA micro-learning sessions. The discussion includes an assessment micro-learning model as a practical framework that can also be utilize as a micro-learning planning tool. The article closes with a summary of the research project.

Learning in team meetings

> A collection of different individuals is not a sufficient condition to learning as a team (Boon, 2013, p. 230).

Gustavsson (2009) posits that a community of practice in the context of learning at work needs to be integrated into everyday working activities. Team meetings arguably are the most common workplace activity, yet research to date about learning in team meetings is limited.

What is known is that more meetings are happening in the workplace. Meetings have increased in length and frequency over the past 50 years, to the point where executives spend an average of nearly 23 hours a week in them (Rogelberg, Scott, & Kello, 2007; Rogelberg, 2018). This is a significant investment in organisational, people and time resources.

When considering the positive return on investment from the increased number of meetings a senior executive stated in a recent Harvard Business Review;

> I believe that our abundance of meetings at our company is the Cultural Tax we pay for the inclusive learning environment that we want to foster… and I'm ok with that. If the

alternative to more meetings is more autocratic decision-making, less input from all levels throughout the organization, and fewer opportunities to ensure alignment and communication by personal interaction, then give me more meetings any time! (Perlow, Hadley & Eun, 2017, p. 1).

The latest key issues reported in the research literature about team meetings include a paradigm shift. Teams have entered a new era (Tannenbaum, Mathieu, Salas, & Cohen, 2012) and need to operate in "more fluid, dynamic and complex environments, needing to adapt to virtuality, changing boundaries and calls for new ways of operating" (p. 3).

Even so, the systemic meeting issues remain, such as the potential loss of; project knowledge (Akgun, Byrne, Keskin, & Lynn, 2006) sharing of information (Decuyper, Dochy, & Van den Bossche, 2010), sharing knowledge awareness (Dehler Zufferey, Bodemer, Buder, & Hesse, 2010), team decision making (Halvorsen & Sarangi, 2015) and team learning (Nisbet, Dunn, & Lincoln, 2015; Decuyper et al., 2010).

Teams today need to navigate through the complexities of team members belonging to more than one team, team meetings being virtual, and a rapid rate of change. Many researchers – including Decuyper et al. (2010), Nisbet et al. (2015), Fong (2003), Ratcheva (2009), Tavella and Franco (2014) – all argue that learning opportunities are missed in meetings and valuable knowledge is lost in between meetings. The solution Ewenstein and Whyte (2009) claim is that knowledge work should be at the core of team meetings.

Learning in team meetings is defined by Van Den Bossche, Gijselaers, Segers and Kirschner, (2006) is what allows the "building and maintaining of mutually shared cognition, leading to increased perceived team performance" (p. 490). Boon, Raes, Kyndt and Dochy (2013) argue that "a collection of different individuals is not a sufficient condition to learning as a team" (p. 360).

However, Van den Bossche et al. (2006) consider that "being able to depend on and trust each other when working together is positively related with team learning behaviours and effectiveness" (p. 373). And equally, that building mutually shared cognition through team learning processes enhances team meeting effectiveness.

Informal learning was found to take place with health professionals as part of their attendance at regular team meetings (Nisbet et al., 2015). The meetings provided a practical, time-efficient and relevant opportunity for interprofessional learning, resulting in benefits to individuals, teams and patients. The learning process was determined by attendees' conceptions of their own learning; for example, team meetings were described as learning opportunities resulting from participation.

As with partner knowledge awareness (Dehler Zufferey et al., 2010) learning was articulated through observing others. This included listening and asking questions, participating in discussions, along with gaining insights into other pro-

fessionals' practice and capabilities, and the sharing of academic and theoretical knowledge.

Micro-learning

> Special moments or episodes of learning while dealing with specific tasks or content and engaging in small but conscious steps (Hug and Friesen, 2007, p. 2).

There are differing opinions on the origins of micro-learning; however, what is agreed is that this pedagogy is receiving more theoretical attention driven by recent research. As early as 1970, micro-learning was a term used by William Attea (1970) in conjunction with short micro teaching sessions. Hug (2010) mentioned the varied and relatively new history of micro-learning in outlining the breadth of interpretations, stating that the "discourse, or rather the multiple discourses that have emerged and developed around micro-learning are above the polyvocal and international" (p. 48). This was supported by Eldridge (2017) who considers that the field of micro-learning is in its infancy but rapidly involving (p. 51).

The definition of workplace micro-learning can be summarised as learning with micro content in small, fragmented learning units, consumed quickly (up to 20 minutes), which cause only "short-term interruptions to the actual working process" (Decker, Hauschild, Meinecke, Redler, & Schumann, 2017, p. 133).

Micro-learning is generally characterised by brief amounts of time committed in small chunks, with short periods of effort and narrow topics (Hug & Frieson, 2007). Kovachev, Cao, Klamma and Jarke (2011) describe micro-learning as short-term learning activities on small learning units from web resources for self-identified knowledge gaps (p. 51).

In a similar vein Bruck, Motiwalla and Foerster (2012) claim that micro-content, delivered in a sequence of micro-interactions, will enable users to learn without information overload. A further claim is "that learning results, and retention of propositional content improves, through this micro-learning approach" (p. 527). Pimmer & Pachler, (2013) consider that micro-learning and mobile learning contribute to learning for work and learning at work, which supports competence development directly within workplace activities.

Employees require constant training claim Carpenter, Stevens, Flango and Babcock (2016). Unfortunately, most managers cannot afford to pull employees away from their duties for regular, lengthy training sessions, which causes organisational conflict between training and production. Performance-error trends confirmed that an immediate intervention was needed to address this problem. Evidence is mounting to support the idea that small bite-sized learning sessions can lead to better learning results and business outcomes (Gutierrez, 2014).

Transactional analysis micro-learning topics

Transactional analysis (TA) is based on psychological tenets, studies of human interaction and communications, and offers a theory of human behaviour, human development and social psychology. TA can also be viewed through professional practice and applications within organisations, education, counselling and psychotherapy. Originally developed by Eric Berne, a psychiatrist in the 1960s, contemporary transactional analysis theorists (Cornell, 2018; Mazzetti, 2012; Mountain, 2017; Newton, 2016; Tudor, 2013) to name a few – continue to research, examine and develop the core foundational conceptualisation s of TA in relation to current relevancy, practice and applicability. Newton (2016) considers that "transactional analysis is a practical psychology of learning" (p. 31). Lacy (2012) examined learning TA through the learning science of cognitive apprenticeship where learning takes place through observing and learning from others through knowledge, practice and application. This approach aligns well with learning in workplace activities and team meetings.

Contracting – Agreements

Agreements was the term used in the research project for the TA concept and theory of contracts and contracting. A contract was defined by Berne (1963) as an explicit bilateral commitment to a well-defined course of action. At this time, Berne introduced administrative, professional and psychological parameters in the contract definition. Overall TA is considered a contractual method of equal understanding between people to take shared responsibility for achieving the changes planned. Steiner (1974) introduced a group contracting process that included mutual consent, consideration, competency and lawful intent. Stewart and Joines (1987) stated that "contracts were business arrangements or goals not imposed on each other but are arrived at by negotiation" (p. 260). Hay (2011) further developed the contract theory to include six foci, based on Levin's (1982) protection and permission and Steiner's (1989) addition of potency to this particular contracting framework. Hay's six foci are; procedural, professional, purpose, personal, psychological and physis. Each had following questions aligned in relation to the project:
1. Procedural: What attention is needed regarding dates, times, practical implications and administration considerations?
2. Professional: What considerations are required regarding professional boundaries for each participant?
3. Purpose: What determinants are needed to be specific about the purpose of the project and the expected outcomes?

4. Personal: What considerations are necessary regarding personal commitments and interactions within the group and to others?
5. Psychological: What unspoken things need to be brought to the surface?
6. Physis: What commitments and actions are needed to be in place for learning, professional and personal growth during this project?

Competence Curve – leading change

Understanding change was based on the cycles of development (Kubler-Ross, 1983; Levin, 1982, Napper and Newton, 2000) and the change competence curve (Hay, 1991, 2009) theories and concepts as shown in Figure 1 below. The blue lower-case text shows cycles of development and the black text commencing with a capital letter shows Hay's corresponding competence stages. According to Mountain and Davidson (2012) the competence curve also relates to 'concepts for thriving' (p. 228). They purport that it is natural for people to experience a range of emotions when going through change. By accepting the range and nature of emotions during change that can ebb and flow and not necessarily follow the curve order precisely – this then enables support interventions of self and others during the various stages and phases. Mountain and Davidson (2012) also posit that through understanding the competence curve this model can then be utilised as an assessment tool (p. 230). Appendix 3: Change competence behaviours, needs and leadership strategies shows the assessment and practical strategies information provided to the SLT as a continuing learning resource.
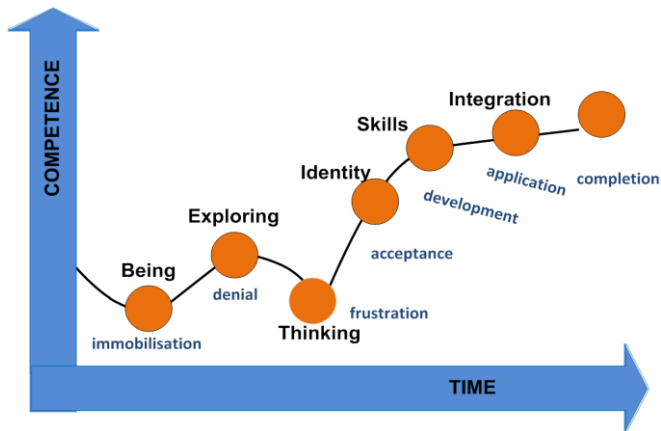

Figure 1
Competence Curve – Kubler Ross (1983), Levin (1982), Napper and Newton (2000) Hay (1991, 2009)

Findings

The learning in meeting learning findings are now presented through examples of learning being integrated into practice. Excerpts are presented to demonstrate specific learning discourse in relation to each TA topic.

Agreements

The objective of the agreements micro-learning session was to introduce the concept and then facilitate the learning being applied in practice so as to form group agreements specifically for this project. A brief introduction to the agreements concept was provided via a PowerPoint presentation followed by a group exercise to decide on the agreements the team wanted.

Upon completing this six-step process the group were invited to discuss how to continue the practice of agreements. This being in terms of regularly checking relevancy and whether updates or additions needed to be included. The group agreements were recorded on a flipchart at the first meeting and then kept within an online project folder. There was an understanding that group agreements would often evolve by being regularly reviewed.

Meeting excerpts illustrating the agreements concept and iterative learning being integrated into practice throughout the course of the project is shown in Table 1. Through the introduction and application of agreements – it became a standard meeting practice. Agreements allowed a transparent process for group consensus and allowed shared mental models to be strengthened by being visually presented and documented.

The first meeting excerpt comes at the end of the micro-learning session and shows the MD reiterating that agreements are regularly reviewed. By the end of the first meeting the learning concept of agreements is being realised as a regular practice and learning experience.

At the second meeting the excerpt highlights the MD taking the lead on formulating a group agreement that is a regular practice for the group when working together as a team. Meeting three presents an excerpt where new agreements from the previous week have been raised that have not yet been documented. Agreement is gained as to the wording of the added agreements.

In the fourth meeting the excerpt pinpoints a key moment where the MD again emphasises the importance of having an agreement so that all SLT members are able to make contributions. The excerpt also demonstrates the nature of agreements being an evolving and iterative meeting practice.

At the fifth meeting the agreement decision made at the fourth meeting is formally agreed. Also, at the fifth meeting OM endorses the commitment to embracing the new meeting practices. The final excerpts in meeting six highlight three incidents where the practice of having an agreement as a group has been integrating into practice.

MD	Managing Director
HM	HUB Manager
RM	Retail Manager
OM	Operations Manager
LDM	Learning & Development Manager
FM	Finance Manager
F	Facilitator

Figure 2
Excerpt Legend

Table 1
Agreements micro-learning integration into practice

Meeting No.	Situation	Excerpt
1	At the end of the micro-learning session	**F:** Is there anything else you want to add to the agreements as a group? Are there any practical ones? **MD:** I think there is a real practical one, that we need to put in the hard yards outside of these sessions as well. **F:** Would you put those words like effort and commitment against expectations? **MD and group** – nods **MD:** One point OM raised was about when we talk about things and there is no action **F:** It is intended that we start every time together with confirming our agenda, timeframes and new agreements needed – that type of thing – so that we put it into practice. **MD:** Obviously we are going to review how effective this is right? **F:** Yes
2	At the end of the meeting	**F:** Before we finish this session let's have a quick word from each of you around where you are at with agreements and if there is something else you need in there? **LDM:** The communications work at a high level needs to be done **MD:** As a concept (agreements model) it is a lot to absorb – the examples were excellent and improved my understanding **OM:** It was great the agreements and things we came up with. I trust you guys that if I do something wrong you will let me know – I am comfortable. **RM:** The key to the whole process is being open to learning
3	The group review of agreements	**MD:** Do we need … some agreement around what we expect of each other and what expertise we can bring to each part of the business? **LDM:** I think all of us need to be open to know that we can all learn stuff from each other and be better in our own roles. **F:** Around adding these core concepts about behaviours and working together as a team that would be added to our agreements – what are they going to be? **MD:** I just think taking our existing agreements and instead of thinking of them inside this meeting environment, that they exist all the time.

Table 1 (cont.)

Meeting No.	Situation	Excerpt
4	Review of additional agreements	**F:** So, in terms of the agreements, the key things that I think came out of Tuesday (last meeting) were about high speed ….so these were the agreements that were made the first time we were together, so the ones that I thought came out of Tuesday were …. Connecting with each other sooner rather than later if there are areas of tension or concern or wondering. That was the agreement wasn't it? **Group:** Nods – yeses **F:** So how was that to be written? **FM:** Deal with the problem when it arises, not just leave it basically. **F:** And having each other's back – I thought that was another one. **HM:** Yeah **F:** Ok so I'll add those to the list
5	Discussing the boundary of decision agreement	**MD:** And I think it is important …. I think we need to agree as a team that if one of us isn't not here what process do we undertake to continue moving forward and balance the need for consultation and involvement from the other person as well. **F:** So, In hearing that when one person is away – is to keep going and to put in a review process – so that everyone is included. **MD:** Then what's your view on that RM (person who is going to be away) **RM:** I think when we have decided where we build stuff together like this (corporate services) usually we come out with a strong outcome. I guess I'm just a little bit apprehensive about the fact that there could be changes and how I can be part of that. **F:** What I am hearing though, is it wouldn't be finalising or making definite decisions until you could contribute **MD:** Yeah – I think it's a really important consideration that we need to agree on – just so we are clear it still allows for everyone to contribute – and we keep moving. **F:** So can we put this up as one of our agreements – that when a SLT member is absent that nothing will be finalised without their contribution?
6	Confirmation of new agreement	**F:** All right so we didn't add anything more to the agreements? Discussed was what agreement to have when an SLT member wasn't present at the meeting. Group – agreed **F:** today you will be finalising your SLT meeting terms of reference so that agreement can be transposed into that work. Essentially though it was that no major decision would be made without input for all SLT members. Is that how everyone understands the agreement? **MD and group** – agreement yeses and gestures.
7	At the end of the meeting an informal agreement was put forward.	**OM:** I think we all need to agree that we don't want the old meetings … which we don't, and let's agree that we don't let that happen, you know? That's how I feel …. That it's up to us to not allow it to happen and with a good agenda, you know, it doesn't have to be a negative thing. **Group** – gestures and noises of agreement **MD:** I agree OM -it is up to our commitment to adopt the new meeting format fully. Thanks.

Table 1 (cont.)

Meeting No.	Situation	Excerpt
8	Informal agreements throughout the meeting.	A lot of discussion with informal agreements about possible actions, timelines and next steps. **LDM:** So we will need to agree on some key messaging that is consistent before RM sends the meeting appointment to the managers. **MD:** Yes
9	During the meeting	**LDM:** We need agreement to ensure our teams are informed about where we are and visa versa with our managers. **F:** Yes, its about good contracts and agreements with people

Source: own research.

Leading change

Before the micro-learning session was facilitated in the fourth meeting of the project, participants had been asked to think about their own experiences of change – whether voluntary or involuntary. The micro-learning session commenced with participants sharing some of these experiences. The change competency curve was presented supported by a handout as shown in Appendix 2, which provides more detailed information for further reading, assessment, strategies and assimilation. The micro-learning was a brief introduction to the topic with the expectation there would continued discussion in the following meetings.

The first excerpt is from SLT members sharing experiences at the beginning of the session. The second excerpt is after the micro-learning session where the MD shares his awareness and asks a question of the group in regard to the progress of change within the SLT. The discussion being highlighted in the excerpt.

The following week when the meeting reflection is taking place, the micro-learning topic is addressed again. An SLT member considers that the micro-learning topic increased understanding of each other and the process of change has taken place. This is also reiterated in the final excerpt. These excerpts provide examples of having introduced a topic to the SLT team for consideration about their own experiences of change to then apply the learning from this experience to the current situation and their leadership roles – and when needing to understand and support their team members' reactions to change.

Table 2

Micro-learning topic – the competence curve – leading change

Excerpt No.	Situation	Excerpt
1	The first activity within the micro-learning session invited feedback from team members about their own experiences of voluntary and involuntary change.	**OM:** voluntary, I do a lot of planning so as to be ready - involuntary change I need quite a bit of time **RM:** I guess for involuntary I'd like to say I think a lot about what the opportunity is and with voluntary I am a planner and I can determine what the change is going to be. **LDM:** With voluntary I have a heightened awareness of the stages of change because I have made the decision. If is involuntary, I tend to go backwards and forwards and wonder what's wrong with what we're doing now? I am aware of the stages I have tended to go through … at the moment I am not sleeping that well – and I know it's not going to be forever **HM:** You have to take the positives from it – cause its obviously led by us – and I am the same – can't sleep at all. When I get to a place where I am comfortable with what's happening I become more settled. **FM:** I don't worry about what might happen bad (my husband does, and it rarely happens). Over the last five years to where I am now, there has been huge change (in this company). My biggest struggle is getting my head around being here (in this SLT group) – and I am to and fro with that. But voluntary change, determined by me – I am usually happy and excited about the change coming up. **MD:** Arguably I am leading and driving the change yet this week I have had role reversal in terms of potential for change in how one of the business channels could be administered. So that has been insightful for me and a potential unplanned change – which has allowed me to have a real fresh perspective on what it is like for me as well as comparing it with leading change.
2	After the micro-learning session	**MD:** Huge awareness and insights for me were around the placings on the spectrum. Asks the group 'how do you guys feel around the speed at which we are progressing? **HM:** It's good overall – however think we could now be faster. **FM:** The graph (slide) was good as I think as a group we are at the top two stages (application and completion) **RM:** Like that we are putting things in place and in action – I think we are onto it. **LDM:** Our teams know something is up – so knowing there is going to be a change point. **OM:** At first I thought we were going too slow – but I think we have needed the time to work as a group. There is no way, at the beginning we could've thrown it out to the wider group 'cause we needed this time – so at the moment I think slow is good. **LDM:** I like to have more time only because I also know we need to get everyone else along as well – so I'm happy with the pace. **MD:** So it sounds like you are all agreeing that having clear planning is important and utilising these learnings.

Table 2 (cont.)

Excerpt No.	Situation	Excerpt
2	After the micro-learning session	**HB:** I think we are pretty well all on the same page as in our group. I would like to see us move faster now **MD:** Well for me I just don't think we could have possible got to this stage without the processes and learning we have been through, particularly today around change, – I feel so much more armed and understanding and I feel more capable of our ability collectively to drive and lead the business change.
3	Then the next week when reflecting on the change micro-learning session.	**MD:** The micro-learning change piece was excellent – that from this learning we as a group moved along way forward on the back of that hardcore learning in relation to our obligations and communications to the whole team. Now have a better understanding of how people think and process change because of that model. **HM:** Yes, I think we actually understand how each other experiences change from that session
4	At the final project meeting when reviewing the learning aspects included and learning experiences in the project.	**FM:** 'I like the structure and the mini learning topics particularly in regard to how we work as a group in team meetings and change. **RM:** We have increased our knowledge as a team **OM:** The change micro-learning sessions was so good for my own self-assessment in relation to myself as a leader and my team.

Source: own research.

Discussion

Incorporating micro-learning topics relevant to the meeting work allowed for instant and deeper learning because of their relevance to the meeting work, the team dynamics and the immediacy of application and integration into meeting practices. The micro-learning sessions and topics were planned as formal learning to be integrated throughout the meetings. Learning in meetings also occurred through observing and gaining insights from others, listening and asking questions, participating in discussions and sharing information which contributed to the progressive nature of mutually shared cognition.

Along with the learning within the micro-learning sessions, there was also spontaneous instances of knowledge transfer and unplanned teaching moments. The spontaneous learning instances represented the immediate learning needs of the meeting group and individual participants within meetings. Learning occurred through "on-the-go" interventions as the information was relevant to the meeting participants and meeting work. Van Den Bossche et al. (2006) agrees that learning in team meetings enhances the building and maintaining of mutually shared cognition.

Introducing participants to the concept of developing group agreements at the beginning of the project work was an important intervention to enable the setting of expectations and boundaries. This was a highly effective intervention for improving meeting practices, transparency of group interactions, clarity of roles, processes and increased understanding. Agreements are a contractual method of equal understanding between people to take shared responsibility for achieving the changes planned. Through having agreements trust in each other fostered learning, knowledge sharing and knowledge creation.

In contrast, introducing a change model mid-way through the project leveraged the change already experienced as a group, along with the confidence gained by working together. Improved communication and the ability to solve problems related to change was also evident as the group related to the individual and team stages and phases related to the competence curve model.

The model provided support strategies for leaders to support themselves, each other and team members through change (as shown in Appendix 2). Each SLT member had staff members directly reporting to them. The leaders identified with being further along the change curve and being more familiar with and more accepting of the change compared to their team members who would be just learning about the change. The change competence guide provided understanding of the typical behaviours and reactions at change stages with strategies support team members.

In both instances' participants were able to apply an experiential frame of reference both as peers and from their subordinates' perspectives. Results showed that adoption of the agreement model was evident throughout all meetings, either formally by revisiting the group agreement or informally as participants requested up-dating the group agreements. The episodes of learning led to building and maintaining mutually shared cognition in the team meetings and the project generally, which improved team performance and team meeting satisfaction.

Even though micro-learning research is in its infancy according to Eldridge (2017), the study by Decker et al. (2017) found that there was high use and adoption of micro-learning when it involved context relevant to the work and could be accessed informally.

When it comes to workplace learning Avery (2016) considers the five criteria are essential. These criteria are; knowledge should be on demand, information must be tailored to meet individual specific needs, learning should be embedded in business processes, employee should be able to collaborate to boost learning and there needs to be confidence in the. Reliability and quality of the information being used.

Table 3 shows the utilisation of these criteria as an assessment tool applied to the research project TA micro-learning topics. These criteria can also be utilised as a micro-learning planning and preparation tool.

Avery (2016) posits that for these criteria to be successful there needs to be a balanced approach to blended learning in leadership programmes. Further, it is beneficial for there to be a synergistic cycle between formal and informal learning as new concepts are tested in real work situations.

Table 3
Workplace micro-learning criteria

	Avery workplace micro-learning criteria	Research project application
1.	Knowledge should be on demand.	All micro-learning artefacts and resources were available at the session and online to be accessed at any time.
2	Information must be tailored to meet individual specific needs.	Both TA concepts discussed were tailored with exercises to address both group and individual needs.
3	Learning should be embedded in business processes.	Learning sessions took place as agreed within team meetings.
4	Employees should be able to collaborate to boost learning.	The online space allowed participants to comment and upload other relevant resources as they saw relevant to build on learning. As both agreements and the change model were discussed each meeting – integration into practice collaboration took place.
5	There needs to be confidence in the reliability and quality of the information being used.	Anecdotal feedback and qualitative results show confidence in the concepts taught and practiced as being relevant.

Source: Avery, 2016.

Summary

Learning and micro-learning in team meetings has received little scholarly attention, at least with regard to incorporating micro-learning topics into team meetings. However, research on micro-learning in general has increased significantly over the last 10–15 years (Hug, 2010; Eldridge, 2017) as it has become a widespread practice in workplace settings. Learning in team meetings is the subject of new research paradigms and workplace practices.

This study investigated micro-learning as a method for knowledge building and a learning affordance in team meetings. The research argues that incorporating learning into meetings through micro-learning methods enhances outcomes for both individuals and the team. Further, it proposes that introducing knowledge and ways for immediate application and integration improves team learning, meeting performance, meeting practices and knowledge building.

It is not surprising that micro-learning has found a comfortable home in the workplace. There is little debate about the importance of learning at work in re-

lation to economies of scale with performance and business outcomes. Van Poelje (2004) argued that learning occurs in real-life work situations "from key learning events, despite ingrained success formulas or scripts" (p. 225).

TA offers many models and approaches that are meaningful and effective for contemporary business practices and individuals alike. Particularly relevant is the iterative nature of micro-learning in team meetings where reviewing application and integration into practice becomes an on-going learning experience for individuals and the team generally. It is at the intersection of learning, integration into practice and iterative reflection where agreements and the competence curve and TA models and approaches generally, bring deeper understanding and learning opportunities not only for business purposes, also for self-awareness and in relation to the team that can be applied immediately into practice.

Thinking of the future complexities workplaces and staff becoming more digitally savvy, more insistent on receiving just-in-time knowledge, more supportive of collaboration, and more involved in multi-tasking, Tannenbaum et al. (2012) posits that the "science of workplace training will need to be even more multidisciplinary, incorporating findings from neuroscience, computer science, change management, human performance modelling and skill acquisition" (p. 94). With this in mind further research into the delivery and integration of TA models within modern workplace learning approaches will continue to test the validity of TA being very relevant for individuals and teams in current and future contemporary organisations and workplace settings.

Appendix 1

Table 3
Micro-learning topics, relationship to practice, learning and application plan

Meeting	Topic	Relationship to the project	Learning and application into practice
1	Agreements (contracts)	Agreements for meetings regarding practice, boundaries, behaviour, expectations of each other, the meetings, purpose and outcomes.	Completed in unison as a team and evolved during the project. Documented in the digital group memory. Provided structure and trust. Addressed at each meeting and added to during meetings as required.
2	Project purpose and goals	Individual identification of issues to address with proposed solutions.	Agreed values, solutions and time-framed actions.
3	Balance score card	Revisited the business model to align strategic goals and actions.	Strategic goals to be aligned to the business score card quadrant.
4	Change competency curve	Change model highlighting typical behaviours during various stages of change through the roles of leaders and team members.	Realisation that this team were already well into the change process, whereas staff were yet to begin. Planning to support the change phases.
5	Meeting structures	Terms of reference development of a for senior leadership team (SLT) meetings.	Application of templates, central repository for all documents and meeting materials, time structures, roles at meetings.
6	Recognition	Assessment of the positive and negative types of recognition given to self and others and the impact.	Techniques for increasing motivation and changing unwanted patterns through individual leadership communications.

Appendix 2

Table 4
Change competence curve – behaviours, needs, leadership strategies

	STAGE	Behaviour Clues & Observations	Reason	Individual Needs: Yours & Others	Leadership strategies to support Staff
1	**Immobilisa-tion** **BEING**	We need time to absorb the change and to compare our expectations to the new reality. Can appear to be marking time, doing nothing, maybe not coping. **Competence drops** **Withdrawal** **Marking time**	• We lack information about the new situation. • We are concerned about doing it wrong and appearing stupid. • We may lack the motivation to make the change work.	Time to get used to being in a new situation. We need reassurance and not to be pressured into starting the change too quickly. **Reassurance** **Time to get used to the change**	Provide clear and written information about change You're doing fine Ask me anytime… Contain anxiety **STAY IN FREQUENT CONTACT WITH INDI-VIDUALS**
2	**Denial** **DOING**	We act as if our behaviour patterns and knowledge from the past will still be appropriate. We hope our existing skills and knowledge will still be useful. **Can act as if nothing has changed** **Can waste time**	Problems can arise if: • We feel a threat to our level of competence and skill. • We are reluctant to experiment. • We fear failure and rationalize that it worked okay for us in the past so why not now. • We can be unaware of our denial and continue to do and behave in that was previously successful. Slowly we allow our defence mechanisms to weaken and start to notice the need for change.	We want to explore at our own pace. We want others to be patient with us while we take time to describe and assess our situation. We may want to go off on our own to get more information, or to meet others and find out what they would do. **Patience** **Change to explore own way**	I like the way you ask awkward questions Provide clear boundaries including what is open to negotiation and what is a management decision **STIMULATE STAFF – OPEN COMMUNICA-TION**

Table 4 (cont.)

	STAGE	Behaviour Clues & Observations	Reason	Individual Needs: Yours & Others	Leadership strategies to support Staff
3	**Frustration** **THINKING**	We now recognize we need to do things differently and we don't know how. We can feel incompetent during our efforts to apply new approaches. Others may think of us as incompetent as we struggle with new skills, new knowledge and new situations. Sometimes we turn our frustration against others and see to blame them for our position. We can blame others for not helping us enough, not training us properly beforehand, even not warning us against the problems we now face. May want to manage the managers Know they need to change but not sure how	• Potential overload due to our genuine need to learn new approaches • Fear of losing status through decreased competence • Loss of our power base or our network of contacts • We struggle to work out how we should be and what to do different, what new skills do we need, what qualities are required in the new situation.	We now want to do our own thinking about the change. We need tolerant listeners to discuss our thoughts and opinions. We need models and frameworks, so we can understand what is going on for us. It will help if people ask us questions and listen to our ideas with interest. Tolerance Test own Thinking	Review information, timetables and roles Focus on individuals Invite feedback Listen to problem solving without judgment Ask how individuals are feeling PROVIDE CLEAR IN-STRUCTURES
4	**Acceptance** **IDENTITY**	We let go of the attitudes and behaviours and skills that were comfortable and useful in the past. We can now start the process of acquiring new skills. We begin to test out our new ways of doing things. There will still be occasional moments of frustration, such as when our new skills are not quite practiced enough, or we identify yet	• We consider the differences and develop frameworks for understanding where we are now. • We begin to actively experiment. • We may still appear incompetent to a degree. • We are working out our identity in the changed situation, so although we have now accepted the change there will still be temporary	We move into creating our revised identity. We need to believe that we have an element of choice and that others will be accepting of whatever we decide. At this stage we consider alternatives, so it will help if we have some knowledge of problem solving and decision-making models.	Invite staff to work out implications of options and prioritise effectiveness Give positive feedback about individuals in front of their peer group GIVE RECOGNITION TO STAFF AND WORK

Table 4 (cont.)

	STAGE	Behaviour Clues & Observations	Reason	Individual Needs: Yours & Others	Leadership strategies to support Staff
4	**Acceptance** **IDENTITY**	another area where we lack knowledge. This phase represents our move psychologically into our personal learning cycle. We review the situation and compare it with the past to identify difference. Time to explore and select options appropriate to new situations	problems as we try out new approaches.	Acceptance Defining own identity	
5	**Develop-ment** **SKILLS**	We concentrate on developing the skills and knowledge required in the new situation. We become increasingly competent at operating in the changed environment. We make decisions about the most effective techniques and then become skilled at using them. Acquiring new skills and knowledge	Our knowledge increases so that others come to regard us as the appropriate expert in our field.	We are now ready to learn the skills required to effect the change. Coaching and training might be required once we have determined our action plan. Training Support Team Building	Provide time for training and development including mentoring and coaching Feedback to provide a sense of progress Focus on developing teams and interdependence FOSTER EXCITING ASPECTS OF WORK
6	**Application** **INTEGRA-TION**	Most importantly we consolidate our identity in our changed role / changed CRM. We develop our own views on how the job should be done, how we should relay this to others and how they should relay it to us.	We resolve in our minds the questions about our status, our new skills, our beliefs about the situation, and our view of the organization. In particular we work out how we fit in the new scheme of things.	We want to integrate the previous stages. We start pulling together our prior efforts of exploration, decision making and learning. Gradually, we begin to feel that we are performing as we should. We may	Compliment staff on how they are integrating change Be clear about future change, budgets, timetables Review strategic plan Revise objectives for the year

Table 4 (cont.)

	STAGE	Behaviour Clues & Observations	Reason	Individual Needs: Yours & Others	Leadership strategies to support Staff
6	**Application** **INTEGRA-TION**	Applying new skills Teams settle		rework some of the earlier stages to cover parts we missed. Encouragement Delegation	ENSURE ENDINGS OF PROJECTS & MOVING ON / NEW CHANGES
7	**Completion** **RECY-CLING**	We now feel comfortable and competent once again – so much so that we are no longer conscious of having experienced a transition. Maximum competence	We are really into the new situation and have ceased to compare it, favourably or unfavourably, to our position before the change.	We have completed our transition and are on our way with a changed approach. Soon we will hardly remember how we were before we made the changes. Interdependence	Roles models, champions and leaders

References

Akgun, A.E., Byrne, J.C., Keskin, H., & Lynn, G.S. (2006). Transactive memory system in new product development teams. *IEEE Transactions on Engineering Management*, *53*(*1*), 95–111. http://dx.doi.org/10.1109/TEM.2005.857570.

Attea, W.J. (1970). VTR: In-service tool for improving instruction. *Educational Leadership*, *28*(*2*), 147–150.

Avery, A. (2016). *What is the impact of blended learning including micro-learning on manager learning and behavior change vs. impact of classroom learning?* Cornell University ILR School. Retrieved from http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1110&context=student&sei-

Berne, E. (1963). *The structure and dynamics of groups and organisations.* New York, NY: Ballantine.

Boon, A., Raes, E., Kyndt, E., & Dochy, F. (2013). Team learning beliefs and behaviours in response teams. *European Journal of Training and Development*, *37*(*4*), 357–379. http://dx.doi.org/10.1108/03090591311319771.

Bruck, P.A., Motiwalla, L., & Foerster, F. (2012). Mobile learning with micro-content: A framework and evaluation. *BLED Proceedings 2012*. Retrieved from https://aisel.aisnet.org/bled2012/2/

Buchem, I., & Hamelmann, H. (2010). Microlearning: A strategy for ongoing professional development. *eLearning Papers, (21*), 1–15. Retrieved from http://www.scirp.org/(S(czeh2tfqyw2orz553k1w0r45))/reference/ReferencesPapers.aspx?ReferenceID=1644222

Carpenter, J., Stevens, D.R., Flango, V., & Babcock, L.K. (2016). *Ready, aim, perform! Targeted micro-training for performance intervention.* Paper presented at the Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC), Orlando, FL, November 28-Dec 2, 2016. Retrieved from http://files.eric.ed.gov/fulltext/ED571523.pdf

Cornell, W.F. (2018). *Into TA: A comprehensive textbook on transactional analysis*. Routledge.

Decker, J., Hauschild, A. L., Meinecke, N., Redler, M., & Schumann, M. (2017). Adoption of micro and mobile learning in German enterprises: A quantitative study. In: *Proceedings of the European Conference on e-Learning* (pp. 132–141). ECE 2017, Porto, Portugal.

Decuyper, S., Dochy, F., & Van den Bossche, P. (2010). Grasping the dynamic complexity of team learning: An integrative model for effective team learning in organisations. *Educational Research Review*, *5*(*2*), 111–133. http://dx.doi.org/10.1016/j.edurev.2010.02.002.

Dehler Zufferey, J., Bodemer, D., Buder, J., & Hesse, F.W. (2010). Partner knowledge awareness in knowledge communication: Learning by adapting to the partner. *The Journal of Experimental Education*, *79*(*1*), 102–125. http://dx.doi.org/10.1080/00220970903292991.

Denzin, N.K., & Lincoln, Y.S. (2005). *The Sage handbook of qualitative research.* Thousand Oaks CA: Sage.

Doganata, Y., & Topkara, M. (2011). Visualizing meetings as a graph for more accessible meeting artifacts. In *Proceedings of the 2011 annual conference Extended Abstracts on Human Factors in Computing Systems: CHI EA '11* (p. 1939). New York, NY: ACM Press. http://dx.doi.org/10.1145/1979742.1979850.

Durkheim, E. (1982). *The rules of sociological method*. New York, NY: The Free Press. Retrieved from http://jefftirshfield.com/wp-content/uploads/2017/09/Durkheim-Emile-Rules-of-Sociological-Method-1982.pdf

Edmondson, A.C., Dillon, J.R., & Roloff, K.S. (2006). *Three perspectives on team learning: Outcome improvement, task mastery, and group process.* Working Paper, Division of Research, Harvard Business School. Retrieved from http://www.hbs.edu/faculty/Publication%20Files/07-029.pdf

Eldridge, B. (2017). Developing a micro-learning strategy with or without an LMS. In: *The International Scientific Conference eLearning and Software for Education* (Vol. 1, p. 48–51). http://dx.doi.org/10.12753/2066-026X-17-007.

Ewenstein, B., & Whyte, J. (2009). Knowledge practices in design: The role of visual representations as 'epistemic objects'. *Organization Studies*, *30*(*1*), 7–30. http://dx.doi.org/10.1177/0170840608083014.

Faltin, N., Von Rosing, M., & Scheer, A.-W. (2014). Real-time learning: Business process guidance at the point of need. In: M. von Rosing, A.-W. Scheer, & H. von Scheel (Eds.), *The complete business process handbook* (pp. 639–647). http://dx.doi.org/10.1016/B978-0-12-799959-3.00031-8.

Fine, G.A. (2015). Participant observation. In: J.D. Wright (Ed.), *International encyclopedia of the social and behavioural sciences* (pp. 530–534). London, UK: Elsevier. http://dx.doi.org/10.1016/B978-0-08-097086-8.44041-9.

Fong, P.S.W. (2003). Knowledge creation in multidisciplinary project teams: An empirical study of the processes and their dynamic interrelationships. *International Journal of Project Management*, *21*(*7*), 479–486. http://dx.doi.org/10.1016/S0263-7863(03)00047-4.

Gutierrez. (2014, April 15). *The age of bite-sized learning: What is it and why it works.* Shift eLearning. Retrieved from https://www.shiftelearning.com/blog/bid/342367/The-Age-of-Bite-sized-Learning-What-is-It-and-Why-It-Works

Gustavsson, M. (2009). Facilitating expansive learning in a public sector organization. *Studies in Continuing Education*, *31*(*3*), 245–259.

Halvorsen, K., & Sarangi, S. (2015). Team decision-making in workplace meetings: The interplay of activity roles and discourse roles. *Journal of Pragmatics*, *76*, 1–14. http://dx.doi.org/10.1016/j.pragma.2014.11.002.

Hay, J. (2009). *Working it out at work: understanding attitudes and building relationships.* Wildhill, Broadoak End, UK: Sherwood.

Hay, J. (2011). Setting up the coaching contract. *IDTA Newsletter*, *6*(*2*), 5–6.

Hug, T., & Friesen, N. (2007). Outline of a microlearning agenda. In T Hug (Ed.), *Didactics of Microlearning. Concepts, Discourses and Examples,* (pp. 15-31). Munster, Germany: Waxmann Verlag.

Hug, T. (2010). Mobile learning as microlearning: Conceptual considerations. *International Journal of Mobile and Blended Learning*, *2*(*4*), 47–57. http://dx.doi.org/10.4018/jmbl.2010100104.

Kauffeld, S., & Lehmann-Willenbrock, N. (2012). Meetings matter: Effects of team meetings on team and organizational success. *Small Group Research*, *43*(*2*), 130–158. http://dx.doi.org/10.1177/1046496411429599.

Kim, J., & Shah, J.A. (2016). Improving Team 's Consistency of Understanding in Meetings. *IEEE Transactions on Human- Machine Systems 46* (*5*), 625–637.

Kovachev, D., Cao, Y., Klamma, R., & Jarke, M. (2011). Learn-as-you-go: New ways of cloud-based micro-learning for the mobile web. In: H. Leung, E. Popescu, Y. Cao, R. Lau & W. Nejdl (Eds.), *Advances inWeb-Based Learning – ICWL 2011* (pp. 51–61). Berlin: Springer.

Kübler-Ross, E. (1983). *On children and death. How children and parents can and do cope with death.* Touchstone, New York, NY.

Lacy, M. (2012). Learning Transactional Analysis through Cognitive Apprenticeship. *Transactional Analysis Journal*, *42*(*4*), 265–276.

Levin, P. (1982). The cycle of development. *Transactional Analysis Journal, 12*(*2*), 129–139.

Mazzetti, M. (2012). Phantoms in organizations. *Transactional Analysis Journal*, *42*(*3*), 199–208.

Mountain, A. (2017). Using the OK models model to enhance clarity in communication. *Transactional Analysis Journal*, *47*(*1*), 42–53. http://dx.doi.org/10.1177/0362153716681028.

Mountain, A. (2012). Working together: Organizational transactional analysis and business performance. *Human Resource Management International Digest*.

Napper, R. & Newton, T. (2000). TACTICS. Ipswich: TA Resources.

Newton, T. (2016). From transactional analysis in education to educational transactional analysis: A personal encounter, *Edukacyjna Analiza Transakcyjna*, *5*, 29–37. http://doi.org/10.16926/eat.2016.05.02.

Nisbet, G., Dunn, S., & Lincoln, M. (2015). Interprofessional team meetings: Opportunities for informal interprofessional learning. *Journal of*

Interprofessional Care, *29*(*5*), 426–432. http://dx.doi.org/10.3109/13561820.2015.1016602.

Perlow, L.A., Hadley, C.N., Eun, E. (2017). Stop the meeting madness. *Harvard Business Review*, *July–August 2017*, 61–69.

Pimmer, C., & Pachler, N. (2013). Mobile learning in the workplace: Unlocking the value of mobile technology for work-based education. In: M. Ally & A. Tsinakos (Eds.), *Mobile learning development for flexible learning.* Edmonton, Canada: Athabasca University Press. Retrieved from http://www.iqpc.com/media/7807/6168.pdf.

Raes, E., Boon, A., Kyndt, E., & Dochy, F. (2017). Exploring the occurrence of team learning behaviours in project teams over time. *Research Papers in Education*, *32*(*3*), 376–401.

Ratcheva, V. (2009). Integrating diverse knowledge through boundary spanning processes: The case of multidisciplinary project teams. *International Journal of Project Management*, *27*(*3*), 206–215. http://dx.doi.org/10.1016/j.ijproman.2008.02.008.

Rogelberg, S.G. (2018). *The surprising science of meetings: How you can lead your team to peak performance*. Oxford University Press, USA.

Rogelberg, S.G., Scott, C., & Kello, J. (2007). The science and fiction of meetings. *MIT Sloan Management Review, 48*(*2*), 18–21.

Steiner, C.M. (1974). *Scripts people live: Transactional analysis oflife scripts*. New York: Grove.

Stewart, I., & Joines, V. (1987). *TA today*. Nottingham: Lifespace Pub.

Tannenbaum, S.I., Mathieu, J.E., Salas, E., & Cohen, D. (2012). Teams are changing: Are research and practice evolving fast enough? *Industrial and Organizational Psychology*, *5*(*1*), 2–24. http://dx.doi.org/10.1111/j.1754-9434.2011.01396.x.

Tavella, E., & Franco, L.A. (2014). Dynamics of group knowledge production in facilitated modelling workshops: An exploratory study. *Group Decision and Negotiation*, *24*(*3*), 451–475. http://dx.doi.org/10.1007/s10726-014-9398-2.

Tudor, K. (2013). Group imago and group development. *Transactional Analysis Journal*, *43*(*4*), 321–333. http://dx.doi.org/10.1177/0362153713516297.

Van Den Bossche, P., Gijselaers, W.H., Segers, M., & Kirschner, P.A. (2006). Social and cognitive factors driving teamwork in collaborative learning environments: team learning beliefs and behaviors. *Small Group Research*, *37*(*5*), 490–521. http://dx.doi.org/10.1177/1046496406292938.

Van Poelje, S.J. (2004). Learning for leadership. *Transactional Analysis Journal*, *3*(*34*), 223–228.

Integrowanie koncepcji AT w spotkaniach zespołu za pomocą metod mikrolearningu

Streszczenie

Mikrolearning w ramach spotkań zespołowych zapewnia natychmiastowe zastosowanie wiedzy i integrację z praktyką. Jako metoda pedagogiczna, mikrolearning rozwinął się w miejscach pracy, ponieważ jest w stanie przekazywać niewielkie ilości wiedzy, która jest istotna, podnosi umiejętności i może być stosowana bezpośrednio w praktyce. Ponieważ więcej spotkań odbywa się w miejscu pracy niż kiedykolwiek wcześniej, wykorzystanie możliwości uczenia się nigdy nie było ważniejsze. Podczas spotkań zespołowych regularnie tracono możliwości uczenia się z powodu konkurujących ze sobą priorytetów, nadmiaru informacji, braku wspólnej uwagi, rozbieżnych modeli mentalnych i braku identyfikacji potrzeb edukacyjnych. W tym artykule omówiono jeden z aspektów doktoranckiego projektu badawczego, skoncentrowanego na uczeniu się podczas spotkań zespołowych. Dyskusję oparto o dwie koncepcje analizy transakcyjnej dostarczane jako tematy mikrolearningu podczas spotkań zespołu i stosowane w praktyce. Przedstawiono koncepcję, wnioski oraz dalsze rozważania.

Słowa kluczowe: spotkania, analiza transakcyjna, mikrolearning.