

Teacher Development

An international journal of teachers' professional development

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/rtde20

Socio-emotional aspects articulated with content in an online teachers' community of practice: 'agreeable dialogue zones'

Alfonso García-Monge, Daniel Bores-García & Gustavo González-Calvo

To cite this article: Alfonso García-Monge, Daniel Bores-García & Gustavo González-Calvo (2024) Socio-emotional aspects articulated with content in an online teachers' community of practice: 'agreeable dialogue zones', *Teacher Development*, 28:2, 215-243, DOI: [10.1080/13664530.2023.2286982](https://doi.org/10.1080/13664530.2023.2286982)

To link to this article: <https://doi.org/10.1080/13664530.2023.2286982>



Published online: 17 Dec 2023.



Submit your article to this journal [↗](#)



Article views: 50



View related articles [↗](#)



View Crossmark data [↗](#)



Socio-emotional aspects articulated with content in an online teachers' community of practice: 'agreeable dialogue zones'

Alfonso García-Monge^a, Daniel Bores-García^{ib} and Gustavo González-Calvo^{ibc}

^aEmbodied Education Research Group, Departamento de Expresión Musical, Plástica y Corporal, Facultad de Educación de Valladolid, Universidad de Valladolid, Valladolid, Spain; ^bResearch group of Humanities and Qualitative Research in Health Science, Departamento de Fisioterapia, Terapia Ocupacional, Rehabilitación y Medicina Física (HumandQRinHS), Universidad Rey Juan Carlos, Madrid, Spain; ^cEmbodied Education Research Group, Departamento de Expresión Musical, Plástica y Corporal, Facultad de Educación de Palencia, Universidad de Valladolid, Valladolid, Spain

ABSTRACT

Many studies highlight the importance of socio-emotional aspects in professional communities of practice (CoP). This study aims to understand how these aspects are articulated with the professional content. An online professional CoP has been subjected to analysis by following a sequential exploratory mixed-methods inductive model combining the analysis of forum contents and in-depth interviews. The results define the concept of 'agreeable dialogue zones' as a strip of conversation in which the search for a friendly and safe environment; professional self-demand; comfort; personal thematic preferences; and the demands of each topic in a written environment are balanced.

ARTICLE HISTORY

Received 16 February 2022
Accepted 3 May 2023

KEYWORDS

Teacher development;
professional development;
community of practice;
dialogue process;
professional small talk

1. Introduction

1.1. Problem outline and purpose of study

If the value of online teacher communities of practice (CoP) was well known before 2020, the pandemic caused by COVID-19 has reinforced their usefulness as a way to support teachers in a complex situation and has rekindled interest in further study of their possibilities and limitations (e.g. Gómez and Suárez 2021; McLaughlan 2021). Wenger (2011, 1) describes communities of practice (CoP) as 'groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly'. According to Wenger (1998), the concept of identity, moulded by the interaction with other participants, is a critical element to understand communities of practice. This identity is built in the interaction with the community (Blanchard, Askay, and Frear 2011), involving different socio-emotional aspects such as the feeling of membership, influence, support, shared emotional connection and the consideration of the rest of the community, hence some of the fundamental motivations of the members of a CoP will be associated with relationships and acceptance (e.g. Hur and Brush 2009; Ridings and Gefen 2004).

The social-emotional aspects as well as the content of the CoPs have been examined in numerous studies. However, as pointed out by Delahunty, Verenikina, and Jones (2014), there is a wide field for researching the dynamics underlying the influences of socio-emotional aspects on the production of content in online settings. Many teachers who participate in the CoP recognize that they seek emotional support or interpersonal relationships (e.g. Vangrieken et al. 2017), but it is worth asking how these motivations condition the shape and the content of the topics dealt with in an online teachers' professional CoP. In order to better understand the dynamics in communities of practice, it would be interesting to inquire into the tension between the participants' search for informational support (professional content) and socio-emotional support (Blanchard, Askay, and Frear 2011).

The purpose of this project is to understand how socio-emotional aspects become articulated with professional content in an online CoP called *(Re)Produce*, made up of teachers, student teachers and university professors from four different countries (Spain, Portugal, Argentina and Brasil).

1.2. Conceptual framework

1.2.1. Socio-emotional aspects of CoPs

Identities are built in interaction, putting into play multiple socio-emotional aspects such as the sense of emotional support, feeling confident in a group, social recognition, feeling of acceptance and sense of belonging (e.g. Bruner 1996; Goffman 2001; Margolis 1998). Stommel (2009, 41) states that 'when we view the individual as socially located, the self is defined by virtue of its membership of, or identification with a particular group'. For Wenger (1998, 145), 'building an identity consists of negotiating the meanings of our experience of membership in social communities'. He uses the concept of 'trajectory' to argue that 'identity is fundamentally temporal, the work of identity is ongoing, because it is constructed in social contexts and defined with respect to interaction of multiple trajectories (Wenger 1998, 154).

In such a negotiation, following Goffman's dramaturgical approach (Goffman 2001), each person carries out a self-presentation in their social interactions with the purpose of provoking a certain effect on their partners and then being able to control the impressions on other people and achieve different socio-emotional goals such as being praised, accepted, supported, gaining influence or consideration (McMillan and Chavis 1986). These mechanisms also work in virtual environments suggesting a desire to align one's self-presentation to community norms (Kalinowski and Matei 2011), by being thorough with the way one composes their posts and preventing misinterpretation and misjudgements (Ellison, Heino, and Gibbs 2006), seeking desirability (Ellison, Heino, and Gibbs 2006), self-controlling and adapting one's language to potential participants (García-Monge, González-Calvo, and Bores-García 2019), or expressing idealized aspects of the selves they wish to become (Manago et al. 2008).

Socio-emotional aspects are also reflected in motivations to remain in a virtual community. Among the said motivations is the sense of membership (Bores-García, González-Calvo, and García-Monge 2018; Cothrel and Williams 1999; Hur and Brush 2009; Yoo, Suh, and Lee 2002), the need for social support (Patton and Parker 2017; Ridings and Gefen 2004), empathy (Hall and Graham 2004; Preece 1999), affective community commitment (Bateman, Gray, and Butler 2011; Blanchard and Markus 2004; Ren et al. 2012), reputation, and peer recognition (Ardichvili, Page, and Wentling 2003).

1.2.2. Relationships and knowledge in professional communities

As suggested by Blanchard, Askay, and Frear (2011), a professional community of practice could be expected to hold a prevalent search for content (informational support) over socio-emotional support. Turner, Grube, and Meyers (2001) conclude that if professionals' informational needs are not met, they are less likely to identify with the group. This conclusion has been confirmed by some health professionals' communities, where participants specially intended for knowledge transfer to have a clinical application and to solve practical problems (Swift 2014). On the other hand, some health professionals' communities also seek to strengthen social bonds (Li et al. 2009).

In some studies, it has been stated that commitment in knowledge transfer is based, among other aspects, on relationships, affective commitment or trust (e.g. Gibson and Meacheam 2009; Hashim and Tan 2015; Mitton et al. 2009; Parboosingh et al. 2011; Tseng and Kuo 2014). Ardichvili, Page, and Wentling (2003) consider that knowledge sharing in virtual communities could be enhanced by a prior relationship between the members. Based on Nahapiet and Ghoshal's (1998) work on how social capital facilitates the creation of new intellectual capital, Chiu, Hsu, and Wang (2006) show how social interaction ties were significant predictors of individuals' knowledge sharing quantitatively, but not qualitatively; and how the norms of reciprocity and identification have a positive effect on trust, while the latter has, in turn, a positive effect on the quality of the knowledge shared.

In CoPs where economic conflicts of interests may arise, hobbyists tend to be more participative than professional members (Jeppesen and Frederiksen 2006).

From other viewpoints, interactions may depend on the organization of the CoP, on whether or not there is a defined core (Cox 2005), on whether or not there are objectives set (McDermott and Archibald 2010), on the interdependence between the members when it comes to solving specific tasks (Kirkman et al. 2011), or on its members' personalities (Wang and Fesenmaier 2003).

As per educational settings, concentrating on three recent bibliographical reviews, the review by Macià and García (2016) only mentions two communities (that of Seo and Han's study [Seo and Han 2013, 230]; and that of El-Hani and Greca's study [El-Hani and Greca 2012]) where socio-emotional support has been remarkable. In the rest of the literature, more emphasis is placed on the sharing of experiences and the reflection on practice (8 cases), the formulation of, or response to support questions (7 cases) or the exchange of teaching materials and resources (7 cases). However, it is generally suggested that pro-social attitudes are important to join and participate in CoPs and that mixed (online and face-to-face) communities are more successful than purely online communities, *where social factors such as trust and pro-social attitudes are more likely to emerge and to reciprocally foster online and offline participation* (Macià and García 2016, 303).

The analysis of 40 teacher CoPs conducted by Vangrieken et al. (2017) shows that the majority of the studies on interpersonal relationships and emotional support are central to a teacher community's atmosphere and stability, effective work, successful outcomes and to stimulate teachers to be open and to share beyond a superficial level.

In the review of 52 empirical studies performed by Lantz-Andersson, Lundin, and Selwyn (2018), it is stated that formally organized communities seek collegial support to help teachers feel less isolated in their classroom work, while informally developed online

teacher communities seek both information and emotional support. In communities with friendly and confident atmospheres, participants feel more comfortable to share ideas (Attard 2012; Booth 2012; Nelson 2009; Tsiotakis and Jimoyiannis 2016; Vause 2009; Visser, Evering, and Barrett 2014).

1.2.3. *Superficiality to prevent conflict? Phatic communication*

Interpersonal problems derived from disagreement or conflict may hinder proper functioning of virtual CoPs (Vangrieken et al. 2017). The problem is that any attempt to avoid the above could end up in superficial discourse or inefficient practice (Jarosewich et al. 2010; Kelly and Antonio 2016; Vause 2009; Wong 2010).

Burbules (1993) identifies four types of dialogue (conversation, inquiry, debate and instruction), some more convergent, headed towards a 'correct' or consensual answer, and avoiding aggressive debate. This author wonders whether online spaces tend to tacitly channel communicative engagements into some forms of dialogue rather than others (Burbules 2006).

Many are the studies that describe teachers' sharing as superficial (Al-Balushi and Al-Abdali 2015; Brown and Munger 2010; Chen, Chen, and Tsai 2009; Davis 2013; Frantz et al. 2015; Jarosewich et al. 2010; Kelly and Antonio 2016; Prestridge 2009; Tsiotakis and Jimoyiannis 2016). Brown and Munger (2010) state that members rarely engage in the depth of processing that is likely required to promote transformative changes in understanding or professional practices. Jarosewich et al. (2010), when reviewing teachers' interactions on discussion forums, stressed that teachers rarely challenge their colleagues or participate in deeper analysis or thinking, and it was discovered that the vast majority of the answers to the others' comments were for support but did not actually address the contents of the course or foster discussion. In many cases, sharing was limited to commonplace educational understandings (e.g. Booth 2012; Kelly and Antonio 2016; Krutka and Carpenter 2016), with a tendency to adjust to dominant professional discourses, developing an embedded ideal identity (Robson 2018). Robson (2018) stresses that 'users carefully manage their performances and the impressions of their peers and present idealized versions of themselves', which reminds us of Goffman's (2001) social dramaturgy cited above.

These dynamics (superficial dialogues about commonplace issues to avoid conflict, offer idealized versions of themselves and receive peer approval) refer us to phatic communication (Jakobson 1960; Malinowski 1923), which is materialized in 'small talk'. Coupland (2003) states that small talk enacts social cohesiveness, reduces inherent threat values involved with social contact, helps to structure social interaction, enhances membership and contact and makes non-controversial interaction possible. It is a form of dialogue which is rather more focused on social relationships than on the activities themselves (Levinson 1992; Miller 2017). Radovanovic and Ragnedda (2012) talk about 'phatic posts' in virtual settings, when referring to those 'non-controversial' dialogues loaded with social value, based on the phatic communication functions detected by Malinowski back in 1923: maintaining social connections to demonstrate that the channel of communication is open, and presenting oneself as a potential communication partner. Facchetti et al. (2011), by using a mathematical model in social network analysis, explain

such a phatic function through their ‘Structural Balance Theory’ as a way to avoid conflict and social tension, enhancing participation and avoiding questioning.

Such a search for social integration and convergence through speech, increasing a speaker’s attractiveness, would also lead to communication accommodation to interlocutors (Giles, Coupland, and Coupland 1991).

These previous works show tensions between the safeguarding of socio-emotional aspects (belonging, acceptance, recognition, avoiding conflict, search for safe environments...) and the search for information (which requires delving into issues and, therefore, debating and confronting ideas).

This study aims to understand how these social-emotional aspects become articulated with professional content in an online CoP; starting with the guiding question: how are the socio-emotional aspects articulated with the generation of content in an online teachers’ community of practice?

2. Methods

2.1. Context and participants

The study was conducted throughout two years of the eight-year working period (specifically, the second and third years) of an online CoP called (Re)Produce, made up of university professors (7), student teachers (19) and primary school teachers (30). This community is hosted on a social network called *MultiScopic*, created with *Ning*. (Re)Produce was created from a face-to-face community originated in 1990, aimed at the professional development of primary school teachers through the analysis of teaching practice and action-research (Bores Calle 2001; Martínez Álvarez 2010). (Re)Produce was created for ongoing enhancement of distance professional sharing (García-Monge, Bores-Calle, and Martínez-Álvarez 2022).

It is an informally developed online teacher community, since participation is voluntary and there is not a specific programme or goals, or a defined community manager or core (Cox 2005), neither does it belong to any training programme or institution.

In the said community, there are eight open forums about different teaching units that some members present and the rest try to analyse or ‘re-produce’ in their own settings (figure 1). Moreover, there is a forum called ‘pedagogical discussions’ (to which some, rather general topics about teaching performance have been transferred) and another one called ‘(Re)Produce Analysis’, devoted, precisely, to the sharing and discussion of the results of research on the community itself.

The researcher’s role is entirely that of the participant observer (Hammersley and Atkinson 1994). The research team is made up of CoP members. For more than 15 years, the researchers have maintained a professional relationship with the rest of the members (other than the university students). This role has enabled ongoing dialogue with the rest of the members about the research subjects. The relationship with the rest of the participants allowed deep and constant dialogues with them about their personal processes when writing and presenting themselves to others.

In the above ‘(Re)Produce Analysis’ forum, the interpretations made on the results were shared. The reinterpretations of the results by the participants represented another source of contrast, although, obviously, this supposes a transformation of their discourses,



Figure 1. Appearance of dialogue in a (Re)Produce forum.

and their new explanations do not have to coincide with the original reasons that led them to make certain decisions (García-Monge, González-Calvo, and Bares-García 2021). In any case, as many researchers have pointed out (e.g. Charmaz 2006; Flick 2012), we understand that all dialogue (in this case between researchers and participants) supposes a transformation to the extent that it induces the participant to condense questions about subjects which either they have not thought about it or are part of more complex plots that are difficult to explain (because they are not aware of them, due to social desirability, due to the need for more time to express it. . .). This collaboration of the participants in the analysis allows them to understand each other in some of their practices.

Such research was developed upon the members' informed consent and respecting their anonymity. The CoP members participated in the validation of the analyses conducted, and the research team engaged in the improvement of the group dynamics, cooperating in its professional development.

2.2. Research design

A sequential exploratory mixed-methods design was used (Creswell 2009; Greene 2007), by following an inductive approach (research questions and concepts were defined progressively as the knowledge about the phenomenon increased, Stake 2010). Denscombe (2008) stresses that mixed methods may be the best way to understand CoP dynamics, as they adapt to the social constructivist approach on which the CoP concept is based.

From an initial anomaly (Ridder 2017) detected in the community dialogue dynamics (some topics were simply avoided), the relations between fieldwork, data interpretation, contrasts with literature and also the members' opinions (adopting a constructivist and transformative position) enabled a progressive identification of the problem, the emergence of concepts and new meanings, and the generation of constructs which were ever more elaborate and supported on the dynamics of the phenomenon (Goetz and LeCompte 1985). A general map of such a methodological process can be seen in Figure 2 and Table 1.

As Flick (2012) points out, this inductive approach to research allows the definition of emerging theoretical constructs (in this case the concept of 'agreeable dialogue zones') or 'low-level theory' (Creswell 2009), supported by the dynamics of the CoP, synchronic and diachronic views of the phenomenon and an understanding of the explanations that participants give to their actions; however, it entails a longer process of the study and a constant contrast between the different data sources.

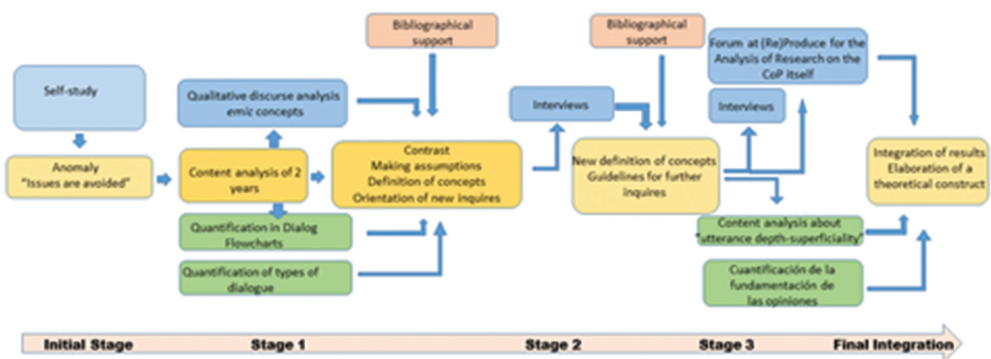


Figure 2. Methodological process.



Table 1. Detailed view of the research process.

Stages of research	Guiding questions	Methodological strategies	Concepts arisen	Conjectures that arise	Theoretical support needs
Initial stage Detection of the anomaly	-What are the CoP's participation dynamics like?	Self-study	'Some topics are avoided' 'Topics dispersion' 'Influence of members on participation'	-What aspects are conditioning the contents addressed and the way to approach them? -Do socio-emotional aspects condition the content?	'Tendency to dispersion in the CoP' (Barab, Makinster, and Scheckler 2003) 'Desirability in the CoP' (Ellison, Heino, and Gibbs 2006)
Stage 1	-Is there topics dispersion? -What topics are addressed in the CoP? -What sorts of dialogues are established? -What desirability concepts appear in the members' utterances?	-Content analysis and representation in Gantt charts (dialogue flowcharts). -Qualitative discourse analysis: <i>emic</i> concepts	-Topics dispersion' is confirmed as well as 'topic avoidance' -The concepts of 'confidence' and 'confrontation avoidance' appear, which nuance the 'topics dispersion' -The concept of 'agreeable dialogue zones' starts to be defined	-Are new topics brought up in order to avoid confrontation? -Does the search for personal security lead to avoid confrontation?	'Social dramaturgy' (Goffman 1970) 'Phatic function of language' (Malinowski 1923) 'Small Talk' (Coupland 2003) 'Phatic posts' (Radovanovic and Ragnedda 2012) 'Motivations to participate in a CoP' (Ridings and Gefen 2004; Wasko and Faraj [Wasko, M. M., & Faraj, S. (2005). "Why should I share? Examining social capital and knowledge contribution in electronic networks of practice." MIS quarterly 35-57.]
Stage 2	-What do members think about the CoP dynamics? -How do members interpret dialogue flowchart results? -What are the personal intervention processes used in the CoP? '(confidence - confrontation') -Why are some topics avoided?	-Interviews with 20 members of the CoP	-Creation of a positive atmosphere' -Relationships as intervention determinants' -Speech accommodation' -Self-control due to lack of time' -Caution due to lack of knowledge' -Comfort' -Difficulty to explain certain issues, ('topic avoidance') -Topic preferences' and -Specialization in topics where more command can be shown' -Good relationships and comfort during explanations'	-Does the search for confidence promote a positive relational environment, guide discourse toward certain topics and make them lose depth?	-Depth-Superficiality' (Sparkes 1992) -Motivations' (Sproull, Conley, and Moon 2013)

(Continued)

Table 1. (Continued).

Stages of research	Guiding questions	Methodological strategies	Concepts arisen	Conjectures that arise	Theoretical support needs
Stage 3	<div><div>-Do members identify a certain 'superficiality' in content?</div><div>-Is the content addressed in depth or superficially?</div><div>-Is peer professional recognition sought?</div><div>-Is professional reputation preservation sought?</div></div>	<div><div>-Interviews with 20 members of the CoP</div><div>-Content analysis about 'utterance depth-superficiality'</div></div>	<div><div>-Balance between relationships and content'</div><div>-Balance between depth and being read'</div><div>-Professional prestige'</div><div>-Projected picture: reflexive but not arrogant'</div><div>-Vague deepening'</div><div>-Unsystematic deepening'</div></div>		

2.3. Data collection and analysis procedures

Initial stage

Self-study: Self-study was initiated by one of the members during the first year of the CoP, by systematically recording in a diary their impressions about their participation in the community and reflections on their own professional development in the group (for more details, see Bores-García, González-Calvo, and García-Monge 2020). Upon analysis of the information collected by the said researcher, an anomaly was found: certain topics are not dealt with ('topics are avoided') and evidence of 'topics dispersion' is also recorded. From the said anomaly the first stages of the present study were initiated, in order to understand this phenomenon.

Stage 1

Content analysis and representation in Gantt charts ('dialogue flowcharts'): With the aim of identifying the addressed subjects, as well as the possible topics dispersion, we decided to represent the dialogue dynamics of the different CoP forums for a two-year period by means of Gantt charts. Two out of the three researchers each performed an 'open coding' process (Glasser and Strauss 1967), by labelling each paragraph with the topic to which it was related. These labels were later compared and adapted by the researchers. The posts produced during two years (1,800,000 words) in six discussion threads were analysed. Afterwards, following an 'axial coding' procedure, the topics were grouped by core themes. Table 2 shows the said core themes together with some examples of the topics collected by each.

Table 2. Topics addressed by the CoP.

Thematic areas	Examples of codes within each thematic area
Greetings, acknowledgements, thanks	–Hail –Acknowledgement
General information	–Articles –News – ...
Teaching Profession	–Initial teacher training –Relationships between teachers – ...
Philosophy, pedagogy, politics and educational sociology	–Social context –Values of education – ...
Physical Education	–Purpose of the PE –Models and Approaches of PE – ...
Legislation and official curriculum	–Legislation and official curriculum
Curricular Sequencing	–Curricular Sequencing
Design of the teaching units	–Methods of evaluation –Definition of content – ...
Methodology and activities	–Activities –Organizational strategies – ...
Teacher	–Sensations and moods –Teacher's embodied experience – ...
Group dynamics in the classroom	–Behavior –Task involvement – ...
Personal learning processes	–Evolution in the learning of specific children –Concrete difficulties of some children – ...

Next, those data were quantified, for the purpose of which the average number of words dedicated to each topic was calculated (42) and that figure was established as a unit to estimate the approximate amount devoted to each topic in posts. Thus, an intervention of up to 42 words had a value of 1; from 42 to 84 words, a value of 2; and so on.

With the above data, a table was created (in Excel). The topics were placed in the ordinate, while the time was placed in the abscissa. The values for each of the posts were entered in the chart with respect to the time, as follows (Table 3).

To make the representation more visual, the values were replaced with circles (each circle size was according to its value). Figure 3 is an example.

Thanks to these values, a descriptive analysis was performed to determine the topics on which posts were focused.

Qualitative discourse analysis: Simultaneously, each researcher performed ‘data-driven coding’ (Gibbs 2007) on the posts, guided by the forms or participation and interaction, topics dispersion and the possible influence of socio-emotional aspects on content. In this coding appeared emic concepts such as ‘confidence’ and ‘confrontation avoidance’. The analysis of emerging categories was conducted through the contrast procedures referred to by Strauss and Corbin (2002): ‘comparison of possible meanings’ of the posts, ‘opposite ends technique’, ‘difference and similarity contrast’ between posts within the same category, and a prior ‘contrast with theory’.

Stage 2

Interviews with 20 members of the CoP: Uwinga purposive sampling (Emmel 2013), where 10 out of the most active members (5 experienced teachers and 5 student teachers) and 10 less active members (5 experienced teachers and 5 former student teachers) were selected, in-depth interviews were developed (between 60’ and 100’) about personal

Table 3. Dialogue flowchart view.

TOPICS	TIME											
Activities	4	4				7	3					
Organization of space, time										2		
Use of equipment												
Curriculum support materials, videos												
Groupings												
Group control		2				4	2	6	5	3	1	2
Communication			2	2	1	1	1				1	2
												2

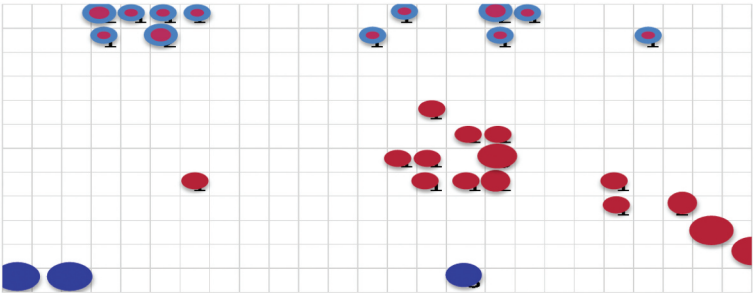


Figure 3. Detail of the fragment graphical representation of a dialogue flowchart.

reasons for dialogue flowcharts, 'topics dispersion', 'topic avoidance' and their personal procedures to elaborate posts ('confidence' and 'confrontation avoidance', especially).

Interviews were later transcribed and coded. Open coding was performed by two researchers, seeking data multi-referentiality (Ardoino 1991). Codes were grouped in categories (e.g. 'Creation of a positive environment', 'Relationships as intervention determinants', 'Speech accommodation', 'Self-control due to lack of time', 'Caution due to lack of knowledge', 'Comfort', 'Difficulties to explain certain topics' or 'Topic preferences') and analysed through contrast procedures, among others, with certain theoretical concepts such as socio-emotional support (Blanchard, Askay, and Frear 2011); 'Social dramaturgy' (Goffman 1970); 'Phatic function of language' (Malinowski 1923); 'Small talk' (e.g. Coupland 2003); 'Phatic posts' (Radovanovic and Ragnedda 2012); or 'Motivations to participate in CoPs' (e.g. Hur and Brush 2009; Ridings and Gefen 2004). The analysis results were presented to the members on the applicable CoP forum and their comments incorporated as a new information source.

The bibliographic search for the contrast was carried out from an initial search in databases (WoS, EBSCO, ERIC) for the term 'Community of Practice' and a subsequent 'snowball' strategy, refined by the concepts cited in the previous paragraph that helped us to interpret the data collected.

Stage 3

New interviews: Upon analysis of the data from the first interview, a second round was performed to deepen aspects such as the depth or superficiality perceived in the posts, motivations to participate and the search for professional recognition. Likewise, two of the researchers performed open coding of the transcriptions. From the later analysis of the codes assigned new categories arose, such as 'balance between relationships and content', 'balance between depth and being read', 'professional prestige', 'projected self-image: reflexive but not arrogant', 'vague deepening in the topics' and 'unsystematic deepening'. The analysis results were presented to the members on the applicable CoP forum and their comments incorporated as a new source of contrast with the researchers' interpretations.

Content analysis: In order to look into the concept of 'post depth-superficiality' seen in some of the interviews, we resolved to analyze the posts by classifying them into levels of depth-superficiality. For this purpose, Sparkes's (1992) proposal was the starting point. Table 4 summarizes the indicators used.

A prior rehearsal to clarify the categories was performed, and several posts and indicators were refined. Afterwards, consistency amongst analyzers was tested (Concordance = 98.48% [(no. agreements – no. disagreements) x 100/Total no. of post-analyzing]).

Final results incorporation stage

Final contrasting and composition of concept maps by integrating relations: The final stage brought together the different trends observed during the study of the socio-emotional aspects which conditioned the professional contents of the CoP. The results of these final contrasts enabled to take a step into the definition of construct 'agreeable dialogue zones'.

Table 4. Levels of depth from Sparkes's proposal (Sparkes 1992).

Levels of depth of discourse	Indicators
Surface	<ul style="list-style-type: none"> –Describes generic situations –Talk about activities or curricular elements describing them –There is no reflection on the implications of the phenomena described –There is no analysis of the phenomena described –Specific situations are described without contemplating the process – ...
Intermediate	<ul style="list-style-type: none"> –Analyses the phenomena dealt with –Analyses processes –Substantiates the analysis of previous experiences or research –Contemplates different possibilities of development of the phenomenon – ...
Deep	<ul style="list-style-type: none"> –Contemplate various dimensions of the phenomenon –Interrelates different socio-political implications of the phenomenon –Critically reflect on the phenomenon –Makes proposals for transformation and emancipation –Makes concrete proposals for social advocacy in education – ...

3 Results

3.1 Initial anomaly: unfulfilled requests

What awakened our interest in the subject were the continuous demands for specification in certain topics on which everybody seemed to agree, but which were not actually being addressed. Examples of such requests were as follows:

Hello everyone. Today I'm being a bit of a mooch. I would like to know what children say when they work in teams and what the structure and dynamics of their discussions are like. what specific attitudes they show. what signs or indicators of engagement, help, involvement, etc. can be seen [...] (Member 5's post, 31/14)

These requests could be explained by personal inquisitiveness (as will later be developed) and by views about the CoP function, like the one detailed by the following member:

Well, I could ask you thousands of questions about class procedures. I think it is interesting, otherwise we would always end up having generalist discussions where actual practice doesn't really matter. These discussions are OK, but I think that, in PE, we lack an analysis of the specific teaching-learning situations and that gives everybody the impression that we are all doing the same things, even though what happens in our classes is totally opposite. When we speak about details, we really see the areas of convergence or divergence between opinions. (Member 9's post, 8/14)

These demands are shared by most members but, in practice, they actually fall unattended. Instead, they are politely evaded:

What interesting questions. From Wednesday on, I promise to answer and try to give it a thought. [...] (Member 15's post, 16/14)

Answers are adjourned, the forum goes on to address other subjects and, in the end, questions are left unanswered.

The members are aware of these dynamics:

I think that we avoid speaking about specific learning processes. Every time we try to focus our discussions through questions or examples of practice that show more details of the same, the subject is evaded and finally forgotten. (Member 3's interview, 6/15)

And of the bias in the topics addressed:

In general, we speak about teaching processes. However, from that subject many topics arise, where methodological issues seem to monopolize the discussion. Little is said about learning and content sequencing. (Member 16's interview, 6/15)

These dynamics had us research about the topics which were approached over time through the dialogue flowchart. In the next section, the results of the said research are summarized.

3.2 Topic distribution: agreeable dialogue zones

Dialogue flowcharts enabled a diachronic representation of the dialogue flow (Figure 4), and the identification of a certain dispersion of topics (67 topics), as well as of those topics avoided or focused on.

It could be verified how dialogues were mainly concentrated on different topics related to the design of units and teaching methodology, while avoiding key topics such as personal learning processes (Table 5 and Figure 5).

Apart from the dispersion of topics, we can see what topics are avoided and those around which dialogues are centred by way of agreeable dialogue zones. Why do the members of this CoP think that this happens?

3.3 Conscious creation of a participation-friendly atmosphere

The members of the community admit that they adjust their speech to adapt to the group and foster good vibes, as follows:

-Trying to seek points in common:

I think that, when we post, we all try to reach an understanding, highlighting what we have in common. (Member 2's interview, 6/15)

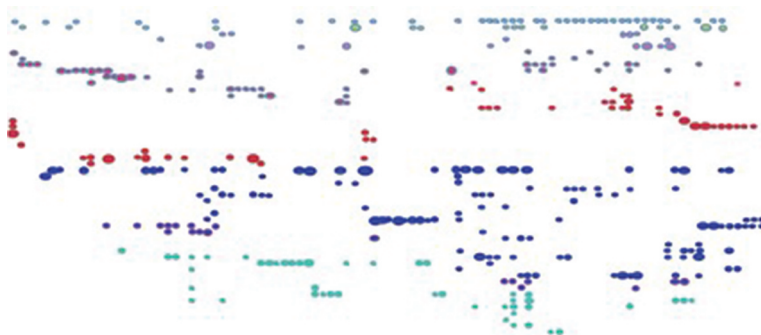


Figure 4. Example of a dialogue flowchart fragment. Each line reflects the allusion to a topic and its evolution throughout the dialogue. The size of the points indicates the length of the comments on each topic in each post.

Table 5. Distribution of posts by topics, volume and percentage.

Thematic areas	Post	Percentage	Volume	Percentage of volume
Greetings, acknowledgements, thanks	111	11.2	111	5.55
General information	43	4.33	82	4.1
Teaching Profession	44	4.43	68	3.4
Philosophy, pedagogy, politics and educational sociology	78	7.87	150	7.5
Physical Education	40	4.03	90	4.5
Legislation and official curriculum	9	0.9	25	1.25
Curricular Sequencing	18	1.81	41	2.05
Design of the teaching units	118	11.9	292	14.6
Methodology and activities	337	34	789	39.46
Teacher	44	4.43	80	4
Group dynamics in the classroom	143	14.42	256	12.8
Personal learning processes	6	0.6	15	0.75

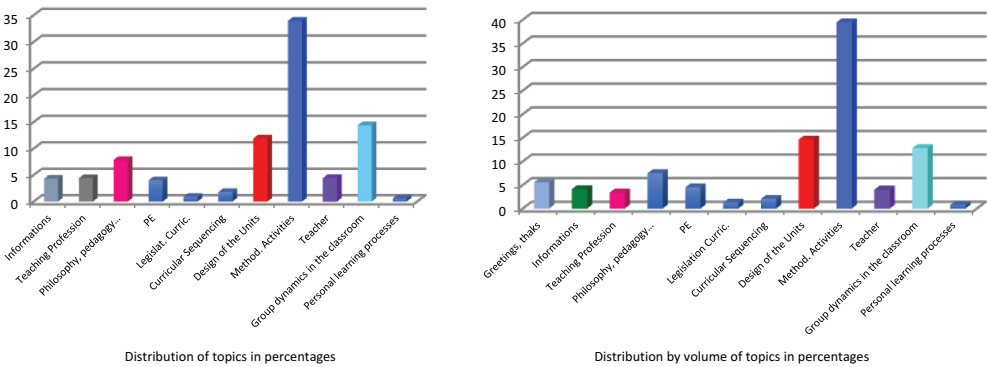


Figure 5. Bar graphs of distribution of topics in percentages and distribution by volume of topics in percentages.

-Trying to create a friendly atmosphere:

There are many catchphrases and posting resources which help create a comfortable atmosphere for the members. We try to foster good vibes. We show kindness, avoid complex terms, categorical negation, depreciations or confrontation. We always encourage ourselves and clarifications are made with caution and politeness. (Member 4's interview, 6/15)

That can clearly be appreciated when welcoming newcomers:

Good evening, Renata. Firstly, I'd like to welcome you to this group and also thank you for being so brave to share your practice with us.

It was very nice to see your website and how professionally the Teaching Unit has been prepared. I also enjoyed viewing some videos of previous years' end-of-school performances. (Member 7's post, 11/13)

-Using humour very often:

Weeeeell!, the community is on fire. . . Even Paul is in the forum. Here's a song for Paul: <https://www.youtube.com/watch?v=H2W4wglPW2c>. (Member 3's post, 3/14)

In this case, jokes are made about the participation of one of the community members who usually acts as a lurker, by dedicating Manu Chao's song *Desaparecido* ('Missing') to him.

-Selecting, apart from the tone, the topics to be dealt with. Some members, admitting that dialogues are established within certain zones, report a double dimension in posts:

I see like two dimensions in that convergence zone in which we move. On one hand is the affective dimension, which consists of making everybody feel comfortable, appreciated and welcomed. On the other hand is the bringing up of issues with which we all feel fine, which do not bore us or make the others lose focus, which enable us to share opinions and establish dialogues. (Member 10's interview, 7/15)

According to this member, the topics dealt with and how to deal with them in each post would be conditioned by the impact on the rest of the members.

This atmosphere is explicated and acknowledged by the members themselves, and they are happy to have achieved it:

That's why this space is so rich. It's an example of innovation which enables many people to speak and work in teams. As Dana said, there're good vibes and, also, it's a social atmosphere of empathy. We all involve in a project that actually belongs to us all. (Member 15's post, 1/15)

3.4. Members' reasons to maintain that relationship-based form of communication

In February 2014, we gathered in one post each member's reasons to guide our utterances:

Je, Je, Je, and I'm still having dinner. [The reference to the dinner was a recurring joke. When somebody took more than usual to answer a post or such an answer was too short, they 'apologized' for being in the middle of, or about to have dinner]. I wasn't actually having dinner. What has really happened is that I've turned aside just to avoid being opposed. However, when I saw that the issue was solved, I've come back to participate. I'll then see if I can come in and out with flying colors, not arguing or being argued, and pretending I am communicating with you. (Member 21's post, 2/14)

It seems that this member's priority is to maintain a dialogue with no conflicts and pass unharmed (not 'being argued', as he wrote). From posts like this and the results of the dialogue flowcharts, we started to deepen, by means of personal interviews, in the personal reasons to elaborate posts.

3.4.1. Post size reduction to foster participation

In both informal conversations and explicit messages on the platform, members were requested to reduce the size of the posts to foster thread follow-up and the participation of newcomers:

Some of our colleagues and students who newly incorporate into the platform talk about the length and complexity of some posts. Some members also stress that, after having been offline for weeks, it is hard to hook on the conversations due to extremely long posts. (Member 5's interview, 6/15)

Good morning, guys. One of the things arising from the research on participation on (Re) Produce is that some members find some comments extremely long. For some reason, I myself have come across these four unread posts and, to be honest, if I had involved less until now, I would probably have decided not to read them all. Moreover, it's difficult for me

to answer a post, because I have to select what to answer or what to clarify, among other things. What I don't say is that extensive posts are something negative. I just think that it's something we could all take into account to enhance other members' participation. (Member 2's post, 12/14)

3.4.2. *Speech accommodation*

Several members admit that, in order to create their own posts, they take the other members into consideration:

There's always a mixture of my own interests, the others' responses, the readers... all of that conditions my posting. (Member 5's interview, 7/15)

(Re)Produce members do not intervene separately, but they consider themselves a part of a complex network of interactions which conditions one's intervention, and appreciate both present and future implications of their intervention (given the fact that the community grows and dialogues remain recorded):

When you write a post, you always try to be understood by the others and any potential readers who may not be participating at that same time, but who could read the thread in the future. You always try to foster good vibes, clarify things without being tiresome [...]. Very often, you refrain from giving more details or data about a topic because you do not want to seem tiresome or conceited. (Member 8's interview, 7/15)

3.4.3. *Personal relationships as a communication buffer and enhancer*

Most members of (Re)Produce know each other well outside the virtual setting and many of them maintain good professional and personal relationships. This enables them to use a rather informal language:

I can be very sure of what I'm saying, but if I talk to another academic, unless my intention is to start an argument with them, I'll always try to retain myself, adapt to their level, etc. However, if I spend too much time doing so, not being able to speak my mind, I'll eventually leave that forum. If somebody you don't know well is constantly rebutting your posts, you need a lot of time to respond to them. We understand each other with no need to elaborate much. In other contexts, if many explanations were required, you'd just leave the forum. Here in (Re)Produce, one can intervene without much time or effort. (Member 16's interview, 7/15)

The above opinion shows two aspects which, according to the member, would lead to limiting participation: to see oneself questioned and compelled to better justify personal contributions (which requires more rigor, grounds and time), while such situations would be buffered in rather friendly environments.

Moreover, it can be inferred that there is a shared knowledge in the group which enables them to shorten explanations, as indicated by this member.

Many of us have shared practices, discussions, pieces of work, etc. Others were initially students and then became colleagues in working groups [...] We've got a lot of shared experience which enables us to understand each other. Even so, there are many personal differences in the way each one understands one same idea. (Member 3's interview, 7/15)

3.4.4. *Caution due to lack of knowledge in the subject*

Some members admit that they do not enter certain discussions because they feel insecure or lack theoretical knowledge. By way of avoidance, they open new dialogue threads:

Sometimes, I don't speak about certain subjects because I lack the necessary knowledge and that could lead me to asking other questions or change the subject. (Member 4's interview, 7/15)

As suggested by the next member, the possibility to talk about different topics may be due to the nature itself of the educational knowledge, its complexity and the multiple levels of analysis which make it up:

I believe that such loss of focus would not happen in a medicine group. If somebody asks for a specific technique, nobody is going to write an answer about the organization of the healthcare system. However, in education, there are many parallel levels. Depending on the viewer, the keys to a problem may derive from organizational aspects, psychological or curricular issues, group dynamics ... (Member 9's interview, 7/15)

3.4.5. *Lack of time and posting*

Another determinant in the direction of the contents is time:

Sometimes, we refrain from elaborating due to the lack of time. Any response could be an article in itself, much more deepening could be made. Any response could be more professional and not just an opinion on the go. (Member 10's interview, 7/15)

The communication medium (posting on a forum where comments will remain overtime) also influences the way to express oneself:

The good thing is that you need to organize your speech, select the topics you want to address, summarize up if you want to be read, and take into account that, whatever you write, everything remains there for anyone who wishes to read it. (Member 5's post, 1/14)

3.4.6. *Comfort*

Some members speak about comfortability when preparing their interventions, as entering certain subjects or arguments could lead to very long posts and, thus, greater dedication. This is why they end up opting for less detailed discussions which can be accessed more easily:

It's true that we avoid entering certain subjects. It's more comfortable to focus the discussion on other aspects which are also interesting but not so demanding. (Member 11's interview, 7/15)

3.4.7. *Posting and subject-specific demands*

There are topics which require further explanations and a more demanding follow-up over time:

Following a pupil's specific evolution requires many explanations to teachers. I'd have to provide many background data in my posts for the case to be understood and, in addition to that, I should post much more often for the progress to be appreciated. (Member 9's interview, 7/15)

Given the situation, some members state that these forms of exchange are limited:

In the end, you talk about education, but you can never deepen in educational practice. Given the difficulties involved in talking about specific learning processes, I think that we never get to the root of what is intended in our professions, which is to be able to deal with every single pupil. [...] We learn and enrich remarkably, but some major subjects are still left to be addressed. (Member 7's interview, 7/15)

3.4.8. Paradox of content extension control while losing focus

Comfort sometimes appears when speaking about the topics in which a given member is interested or of which they have a good command:

It is indeed noticeable that each of us tends to direct the dialogue towards our interests or fields of specialization. Nano tends to open many debates and subjects, Leti and Carlo like to focus on professional development, while Ybet insists on school activities. Many topics are discussed, but all of them concern everyone and help us all participate and learn. (Member 2's interview, 7/15)

Each one of us tries to lead the discussion into their own interests. When one comes across with a topic in which they are not interested, they end up bringing up their own specialty. In the end, only 4 or 5 topics are of your concern. Those topics about which you have more knowledge appeal to you, give you confidence and enable you to have dialogues and learn a bit more. (Member 9's interview, 7/15)

Moreover, each message can remind members of other issues, who would direct their responses accordingly:

Each initial message provokes a different echo depending on each one's sensitivity, and that opens new subjects. (Member 3's interview, 7/15)

Paradoxically, the restraining observed when it comes to submitting elaborate posts was not reflected on loss of focus, and such miscellaneous assortment of topics also ended up making participation difficult:

To tell you the truth, it's hard for me to participate, because there are so many things to comment on and so little time to do it that I don't know what to focus on. (Member 16's post, 1/14)

Therefore, the comfort involved in each one's selection of topics according to personal confidence ends up provoking discomfort in some participants who need rather specific or systematic responses:

Even though I follow the discussions because they are very rich, I do not participate because the object of discussion does not appear so clear to me. [...] I would rather establish a more defined subject per level and deepen in it. (Member 37's interview, 7/15)

Such lack of comfort could also be experienced by some new members. In this way, the function of 'commonplace dialogue areas' of the 'agreeable dialogue zones' would not be accomplished during the first contact with the community, as any newcomers would be trying to find their place amongst the vast conversation history:

Hello everyone,

I'm catching up with the discussions. [...] There are so many things, lots of topics brought up. I want to say that, even when I haven't posted so much, I am learning a lot with all of you. What a great group!

There are so many topics that it's hard for me to start. However, I decided to write a post about some of the topics. (Member 34's post, 2/14)

New members can find no comfort, they have to read a lot. They don't have enough data to find the way through the conversations and be able to post. Small talks are not so small for newcomers. Depending on each one's confidence and knowledge, some topics can be more or less trivial. (Member 6's interview, 7/15)

3.4.9. *'Topic specialization'*

The following member talks about another way to conceive the topics dispersion:

Some members act as spokespersons of their topics of specialization. There may be different members who are experts in their own fields, so recognized by the rest. [...] This could lead to a common conception of PE in which each member insists on the fields which concern them more or about which they are more knowledgeable. (Member 6's interview, 7/15)

According to this view, this community distributes knowledge through experts and all of the members grow jointly by delegating to such experts the contributions about certain educational aspects.

3.5. *(Relative) speech depth and professional reputation*

One ingredient more in the definition of the type of interactions which happen in this community is speech depth, linked to the preservation of professional reputation.

I think we all like to be praised [...] That's why you try to make good contributions. (Member 4's interview, 7/15)

My primary motivation is not to preserve my reputation, but it is clear that I like others appreciate my reasoning and support. (Member 12's interview, 7/15)

What first grabbed my attention when reading the posts was their high level. [...] Contributions have a great deal of depth and one can learn a lot. (Member 22's interview, 7/15)

This is not the typical forum in which people share activities and tell stories of success. Here many teaching practice issues are submitted for reflection and we all grow a lot professionally speaking. (Member 10's interview, 7/15)

Members agree on the great depth of the posts. However, one member presents a different point of view:

Dialogue happens at a level of specificity in which we all seem to be in agreement. However, when further specification is requested or whenever an attempt is made to deepen in an idea, one can see different aspects and, what's more, the wide divergence of opinions about PE. That rarely happens because we always seem to move in such a level of specificity. I think that's on purpose, because it's comfortable and avoids confrontation, having the dialogue flow prevail over in-depth content clarification. (Member 7's interview, 7/15)

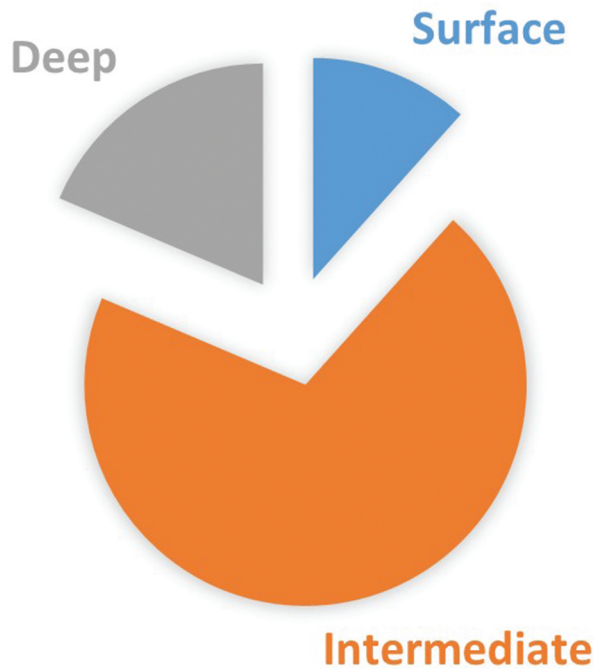


Figure 6. Distribution of the depth level of each post.

Conversations would then be established at a level which fosters dialogue. When more deepening was made and the discussion moved onto a higher level, there would be more fractures in the commonplace discourse. Researching such speech homogeneity, it seems that, once more, the origin of the lack of confrontation is the attempt to maintain a comfortable atmosphere:

I think that's on purpose, because it's comfortable and avoids confrontation, having the dialogue flow prevail over in-depth content clarification. (Member 11's interview, 7/15)

Avoiding confrontation is not bad. When somebody provides better arguments than mine, I'm happy with that. I don't see the point of not backing off. We work as a team. (Member 8's interview, 7/15)

We make a big effort for discussions not to end up in arguments, even when sometimes people say they do. The key is finding a way to post with which nobody feels contradicted. It seems that there is some continuity. We progress as a team. We have perfected certain non-confrontation formulas in order to grow together. (Member 5's interview, 7/15)

In order to verify the acknowledged depth of the discourse, a content analysis was performed by following Sparkes's proposal (Sparkes 1992). This analysis resulted in an intermediate depth level [Figure 6](#).

4. Discussion and conclusions

The purpose of this project is to understand how socio-emotional aspects become articulated with professional content in an online CoP. Beyond the distinction established by authors such as Sassenberg (2002) between topic-based and bond-based groups, (Re) Produce results show how relational dimensions guide content and the way to participate, but some other issues can arise.

It can be appreciated that the results, initially, may fit Goffman's social dramaturgy (Goffman 2001) in that the members of this community guide their dialogues on the impact that they could cause on the rest. In this study, some strategies described in other communities can be identified, such as post size reduction to enhance participation (Arguello et al. 2006), extension control and language adaptation (García-Monge, González-Calvo, and Bores-García 2019), care to prevent misjudgement (Ellison, Heino, and Gibbs 2006) or the avoidance of rather complex topics for fear of criticism (Ardichvili, Page, and Wentling 2003). Probably, these self-presentation forms are linked to self-esteem protection, preservation or boosting, as described in a number of studies (e.g. Leary and Baumeister 2000). From the social dramaturgy and self-esteem preservation viewpoints, and the background idea of 'not arguing nor being argued' expressed by one of the members, it could be inferred that members make a great effort to build a friendly atmosphere (avoiding confrontation, praising the others' opinions, using humour...) to feel safer and less questioned. That would be in line with studies such as Arguello et al. (2006) or Vangrieken et al. (2017), where conflict or questioning are seen as causes for community abandonment. In this sense, the community would tend to phatic communication as a way to participate while being valued and accepted without question (e.g. Radovanovic and Ragnedda 2012), seeking balance between participation and personal confidence-acceptance (Facchetti, Iacono, and Altafini 2011).

Nevertheless, there are some data which explain these interpretative frameworks proposed by social dramaturgy (Goffman 2001), participation-confidence balance (Facchetti, Iacono, and Altafini 2011) or the phatic communication function (e.g. Radovanovic and Ragnedda 2012): the balance between comfort and professional reputation.

Although the members consider the others' views when posting, the search for comfort also conditions interventions. That would ratify what has been described for other teacher communities (e.g. Al-Balushi and Al-Abdali 2015; Brown and Munger 2010), but would nuance Goffman's social dramaturgy.

Such comfort is faced by 'professional dignity', a source of motivation for many members of other CoPs (e.g. Tseng and Kuo 2014). As per the small talk superficiality, this CoP's members do not see their posts as not deep enough, nor do their analyses show a superficial discourse, but an intermediate one.

The tension between comfort and reputation seems to be solved through changes of focus and personal specialization in some topics. The members of the CoP feel that they are 'growing' as a group by taking care of the atmosphere and establishing dialogues where each member finds their place (topic) and a certain level of detail and depth to enter discussions without ending up in conflicts.

Group dynamics would then be established between the preservation of a certain shared viewpoint (at a level of dialogue which enables agreement and conceals any possible differences) and a statement of each one's topic preference. That would reduce

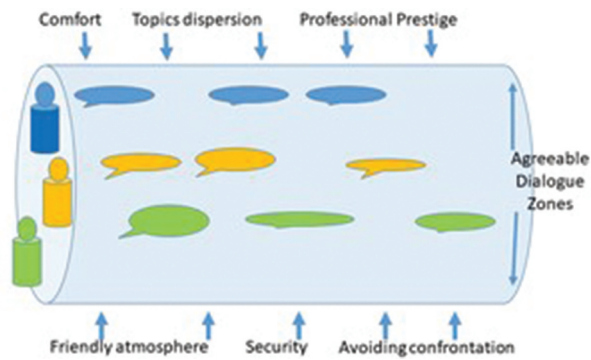


Figure 7. Scheme of the 'agreeable dialogue zones'.

the risk of confrontation. If each member speaks about one topic (within one same perspective and in a level of dialogue which does not lead to discrepancies), there will be just a few points of friction amongst participants.

That is, when we could define the 'agreeable dialogue zones' as professional conversation level involving a balance point to which this online professional CoP's interventions tend, between the generation of a friendly and confident atmosphere, the professional demands and self-presentation to others, comfort, and the demands involved in reflecting a certain topic on a written medium [Figure 7](#). All of these would lead to the selection of topics according to personal preferences, and to a certain topic dispersion.

The functions of agreeable dialogue zones would be to welcome the largest possible amount of community members by moderating their speech and adapting it to the group's preferences, as well as making it possible for everyone to follow the dialogue (suggesting topics which do not turn out to be too specific or require major grounding or training) and trying to create posts that are not very extensive (which do not require extensive data displays).

The problem in such balance lies in leaving out members who seek more systematization in the functioning and treatment of the topics.

Between the search for instrumental and socio-emotional social support (Barrera and Ainlay 1983), the dynamics of participation lead to a balance in the dialogue spaces in which the participants feel that their knowledge needs and those of recognition, participation or belonging are attended to.

Undoubtedly, identities are negotiated and built in interaction (Wenger 1998), but what the dialogue zones show us is that certain 'mechanisms' or 'strategies' appear to protect and guide conversations to avoid negative consequences, to protect against possible confrontations or questions, to achieve security and comfort, while they meet expectations (Brown, Eicher, and Petrie 1986; Fiske 2018).

Of all the possible themes, all the possible dialogues, conversations and answers, the exchanges are being redirected towards a zone of greater comfort, less risk of questioning, more pleasant. This redirection and modulation of the dialogue can be conscious (explained by the participants) or unconscious. Thus, the social presentation formulas (Goffman 2001) would have an intentional part, but another part that would respond to more unconscious mechanisms, possibly protecting self-esteem and configuring a positive social identity (Tajfel 1981).

The implications for professional development of other professional CoPs can be palpable. This case shows the need to pay attention to where the participants' exchanges are moving towards so that, without losing social-emotional support, the informational support is not reduced or transformed. Professional teaching development has many dimensions, but an attempt should be made for communities not to stay in areas of balance ('agreeable dialogue zones') which do not enable full development. Beyond the fact that professional communities attend to socio-emotional needs without renouncing aspects of professional development, it is important to establish mechanisms for evaluating and monitoring the content of the exchanges. Creating process evaluator roles can help. These evaluators can use procedures such as 'dialogue flowcharting' to provide visual evidence of how the dialogue is being steered, possible biases or topics being avoided. These evaluation processes can be integrated into the dynamics of the community so that the participants become aware of these dynamics.

The study opens new lines of research around the described phenomenon of 'agreeable dialogue zones'. We understand that through structural equation models it could be confirmed or nuanced to what extent factors such as comfort, professional reputation, safety, avoidance of confrontation or the generation of a friendly environment condition the content addressed in a professional community of practice.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Alfonso García-Monge is a full professor at the University of Valladolid. His research focuses embodied pedagogy, children's play, physical education, personal learning processes and neuroimaging applied to educational contexts.

Daniel Bores-García is a professor at the Universidad Rey Juan Carlos. His research focuses on the teaching of school physical education and the promotion of physical activity in children and young people.

Gustavo González-Calvo is a full professor at the University of Valladolid. His research focuses on initial teacher training, socio-critical research in education and physical education and the perception of the body of future physical education teachers.

ORCID

Daniel Bores-García  <http://orcid.org/0000-0003-2522-8493>

Gustavo González-Calvo  <http://orcid.org/0000-0002-4637-0168>

References

- Al-Balushi, S., and N. Al-Abdali. 2015. "Using a Moodle-Based Professional Development Program to Train Science Teachers to Teach for Creativity and Its Effectiveness on Their Teaching Practices." *Journal of Science Education and Technology* 24 (4): 461–475. <https://doi.org/10.1007/s10956-014-9530-8>.

- Ardichvili, A., V. Page, and T. Wentling. 2003. "Motivation and Barriers to Participation in Virtual Knowledge-Sharing Communities of Practice." *Journal of Knowledge Management* 7 (1): 64–77. <https://doi.org/10.1108/13673270310463626>.
- Ardoino, J. 1991. "El análisis multirreferencial. In *Sciences de L'éducation, Sciences Mejeures*. » *Actes de Journees d'étude tenues a l'occasion des 21 ans des sciences de l'éducation*." Issy-les-Moulineaux EAP: 173–181.
- Arguello, J., B. S. Butler, E. Joyce, R. Kraut, K. S. Ling, C. Rosé, and X. Wang. 2006. "Talk to Me: Foundations for Successful Individual-Group Interactions in Online Communities. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 959–968). New York: ACM Press. <https://doi.org/10.1145/1124772.1124916>.
- Attard, K. 2012. "Public Reflection within Learning Communities: An Incessant Type of Professional Development." *European Journal of Teacher Education* 35 (2): 199–211. <https://doi.org/10.1080/02619768.2011.643397>.
- Barab, S., J. G. MaKinster, and R. Scheckler. 2003. "Designing System Dualities: Characterizing a Web-Supported Professional Development Community." *The Information Society* 19: 237–256. <https://doi.org/10.1080/01972240309466>.
- Barrera, M., and S. L. Ainlay. 1983. "The Structure of Social Support: A Conceptual and Empirical Analysis." *Journal of Community Psychology* 11 (2): 133–143. [https://doi.org/10.1002/1520-6629\(198304\)11:2<133::AID-JCOP2290110207>3.0.CO;2-L](https://doi.org/10.1002/1520-6629(198304)11:2<133::AID-JCOP2290110207>3.0.CO;2-L).
- Bateman, P. J., P. H. Gray, and B. S. Butler. 2011. "Research Note—The Impact of Community Commitment on Participation in Online Communities." *Information Systems Research* 22 (4): 841–854. <https://doi.org/10.1287/isre.1090.0265>.
- Blanchard, A. L., D. A. Askay, and K. A. Frear. 2011. "Sense of Community in Professional Virtual Communities." In *Virtual Communities: Concepts, Methodologies, Tools and Applications*, edited by L. Shawn, 1805–1820. Hershey, PA: Information Science Reference. <https://doi.org/10.4018/978-1-61520-979-8.ch009>.
- Blanchard, A. L., and M. L. Markus. 2004. "The Experienced 'Sense' of a Virtual Community." *ACM SIGMIS Database for Advances in Information Systems Homepage* 35 (1): 64–79. <https://doi.org/10.1145/968464.968470>.
- Booth, S. 2012. "Cultivating Knowledge Sharing and Trust in Online Communities for Educators." *Journal of Educational Computing Research* 47 (1): 1–31. <https://doi.org/10.2190/EC.47.1.a>.
- Bores Calle, N. M. Vaca, M. Sagüillo, J. Barbero, A. García-Monge, A. Miguel, and L. Martínez-Álvarez. 2001. *La lección de Educación Física en el Tratamiento Pedagógico de lo Corporal*. INDE, Barcelona.
- Bores-García, D., G. González-Calvo, and A. García-Monge. 2018. "(Re)Produce: Desarrollo Profesional Docente en una Comunidad de Práctica Virtual Informal de Educación Física." *Sportis: Scientific Journal of School Sport, Physical Education and Psychomotricity* 4 (3): 480–507. <https://doi.org/10.17979/sportis.2018.4.3.3301>.
- Bores-García, D., G. González-Calvo, and A. García-Monge. 2020. "El acercamiento al tratamiento pedagógico de lo corporal a través de la participación en una comunidad de práctica virtual." *Didacticae* 7 (7): 119–135. <https://doi.org/10.1344/did.2020.7.119-135>.
- Brown, B. B., S. A. Eicher, and S. Petrie. 1986. "The Importance of Peer Group ('Crowd') Affiliation in Adolescence." *Journal of Adolescence* 9 (1): 73–96. [https://doi.org/10.1016/S0140-1971\(86\)80029-X](https://doi.org/10.1016/S0140-1971(86)80029-X).
- Brown, R., and K. Munger. 2010. "Learning Together in Cyberspace: Collaborative Dialogue in a Virtual Network of Educators." *Journal of Technology & Teacher Education* 18 (4): 541–571.
- Bruner, J. 1996. "Meaning and Self in Cultural Perspective." In *The Social Self*, edited by D. Bakhurst, and C. Sypnovich, 18–29. London: Sage.
- Burbules, N. C. 1993. *Dialogue in Teaching: Theory and Practice*. New York: Teachers College Press.
- Burbules, N. C. 2006. "Rethinking Dialogue in Networked Spaces." *Cultural Studies– Critical Methodologies* 6 (1): 107–122. <https://doi.org/10.1177/1532708605282817>.
- Charmaz, K. 2006. *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Thousand Oaks, CA: Sage.
- Chen, Y., N. S. Chen, and C. C. Tsai. 2009. "The Use of Online Synchronous Discussion for Web-Based Professional Development for Teachers." *Computers and Education* 53 (4): 1155–1166. <https://doi.org/10.1016/j.compedu.2009.05.026>.

- Chiu, C.-M., M.-H. Hsu, and E. T. G. Wang. 2006. "Understanding Knowledge Sharing in Virtual Communities: An Integration of Social Capital and Social Cognitive Theories." *Decision Support Systems* 42 (3): 1872–1888. <https://doi.org/10.1016/j.dss.2006.04.001>.
- Cothrel, J., and R. L. Williams. 1999. "On-Line Communities: Helping Them Form and Grow." *Journal of Knowledge Management* 3 (1): 54–60. <https://doi.org/10.1108/13673279910259394>.
- Coupland, J. 2003. "Small Talk: Social Functions." *Research on Language and Social Interaction* 36 (1): 1–6. https://doi.org/10.1207/S15327973RLSI3601_1.
- Cox, A. 2005. "What are Communities of Practice? A Comparative Review of Four Seminal Works." *Journal of Information Science* 31 (6): 527–540. <https://doi.org/10.1177/0165551505057016>.
- Creswell, J. W. 2009. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks: Sage.
- Davis, T. 2013. "Building and Using a Personal/Professional Learning Network with Social Media." *Journal for Research in Business Education* 55 (1): 1–13.
- Delahunty, J., I. Verenikina, and P. Jones. 2014. "Socio-Emotional Connections: Identity, Belonging and Learning in Online Interactions. A Literature Review." *Technology, Pedagogy & Education* 23 (2): 243–265. <https://doi.org/10.1080/1475939X.2013.813405>.
- Denscombe, M. 2008. "Communities of Practice." *Journal of Mixed Methods Research* 2 (3): 270–283. <https://doi.org/10.1177/1558689808316807>.
- El-Hani, C. N., and I. M. Greca. 2012. "ComPratica: A Virtual Community of Practice for Promoting Biology Teachers' Professional Development in Brazil." *Research in Science Education* 43 (4): 1327–1359. <https://doi.org/10.1007/s11165-012-9306-1>.
- Ellison, N., R. Heino, and J. Gibbs. 2006. "Managing Impressions Online: Self-Presentation Processes in the Online Dating Environment." *Journal of Computer-Mediated Communication* 11 (2): 415–441. <https://doi.org/10.1111/j.1083-6101.2006.00020.x>.
- Emmel, N. 2013. *Sampling and Choosing Cases in Qualitative Research: A Realist Approach*. London: Sage.
- Facchetti, G., G. Iacono, and C. Altafini. 2011. "Computing Global Structural Balance in Large-Scale Signed Social Networks." *Proceedings of the National Academy of Sciences of the United States of America* 108 (52): 20953–20958. <https://doi.org/10.1073/pnas.1109521108>.
- Fiske, S. T. 2018. *Social Beings: Core Motives in Social Psychology*. Hoboken, NJ: John Wiley and Sons.
- Flick, U. 2012. *Introducción a la investigación cualitativa*. Madrid: Morata.
- Frantz, J. M., J. Bezuidenhout, V. C. Burch, S. Mthembu, M. Rowe, C. Tan, J. Van Wyk, and B. Van Heerden. 2015. "The Impact of a Faculty Development Programme for Health Professions Educators in Sub-Saharan Africa: An Archival Study." *BMC Medical Education* 15 (1): 7. <https://doi.org/10.1186/s12909-015-0320-7>.
- García-Monge, A., N. Bores-Calle, and L. Martínez-Álvarez. 2022. "Aprendizaje expandido: gestión de una comunidad de práctica online para educadores físicos." *Revista Internacional de Medicina y Ciencias de la Actividad Física y del Deporte* 22 (88): 765–786. <https://doi.org/10.15366/rimcafd2022.88.004>.
- García-Monge, A., G. González-Calvo, and D. Bores-García. 2019. "'I Like the Idea but ...': The Gap in Participation in a Virtual Community of Practice for Analysing Physical Education." *Open Learning: The Journal of Open, Distance and E-Learning* 34 (3): 257–272. <https://doi.org/10.1080/02680513.2018.1505486>.
- García-Monge, A., G. González-Calvo, and D. Bores-García. 2021. "Posibilidades y limitaciones de la indagación inductiva con métodos mixtos en el análisis de la dinámica de diálogo en una comunidad de práctica profesional on-line." *Education in the Knowledge Society (EKS)* 22: e24400. <https://doi.org/10.14201/eks.24400>.
- Gibson, J., and D. Meacham. 2009. "The Individual and Organizational Commitments Needed for a Successful Diabetes Care Community of Practice." *Health Services Management Research* 22 (3): 122–128. <https://doi.org/10.1258/hsmr.2008.008018>.
- Giles, H., N. Coupland, and I. Coupland, eds. 1991. *Contexts of Accommodation*. Cambridge: Cambridge University Press.
- Glasser, B. G., and A. L. Strauss. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York: Aldine de Gruyter.

- Goetz, P. E., and M. D. LeCompte. 1985. *Etnografía y diseño cualitativo en investigación educativa*. Madrid: Morata.
- Goffman, E. 1970. *Strategic Interaction*. Philadelphia: University of Pennsylvania Press.
- Goffman, E. 2001. *La presentación de la persona en la vida cotidiana*. Buenos Aires: Amorortu.
- Gómez, R. L., and A. M. Suárez. 2021. "Extending Impact Beyond the Community: Protocol for a Scoping Review of Evidence of the Impact of Communities of Practice on Teaching and Learning in Higher Education." *International Journal of Educational Research Open* 2:100048. <https://doi.org/10.1016/j.ijedro.2021.100048>.
- Greene, J. C. 2007. *Mixed Methods in Social Inquiry*. San Francisco: Jossey-Bass.
- Hall, H., and D. Graham. 2004. "Creation and Recreation: Motivating Collaboration to Generate Knowledge Capital in Online Communities." *International Journal of Information Management* 24 (3): 235–246. <https://doi.org/10.1016/j.ijinfomgt.2004.02.004>.
- Hammersley, M., and P. Atkinson. 1994. *Etnografía. Métodos de investigación*. Barcelona: Paidós.
- Hashim, K. F., and F. B. Tan. 2015. ""The Mediating Role of Trust and Commitment on Members' Continuous Knowledge Sharing Intention: A Commitment-Trust Theory Perspective." *International Journal of Information Management* 35 (2): 145–151. <https://doi.org/10.1016/j.ijinfomgt.2014.11.001>.
- Hur, J. W., and T. A. Brush. 2009. "Teacher Participation in Online Communities." *Journal of Research on Technology in Education* 41 (3): 279–303. <https://doi.org/10.1080/15391523.2009.10782532>.
- Jakobson, R. 1960. "Linguistics and Poetics." In *Style in Language*, edited by T. Sebeok, 350–377. Cambridge: Massachusetts Institute of Technology Press.
- Jarosewich, T., L. Lenhart, L. Krosnick, L. Vargo, K. Vance, J. Salzman, and K. Roskos. 2010. "Say What? The Quality of Discussion Board Postings in Online Professional Development." *New Horizons in Education* 58 (3): 118–132.
- Jeppesen, L. B., and L. Frederiksen. 2006. "Why Do Users Contribute to Firm-Hosted User Communities? The Case of Computer-Controlled Music Instruments." *Organization Science* 17 (1): 45–63. <https://doi.org/10.1287/orsc.1050.0156>.
- Kalinowski, C., and S. A. Matei. 2011. "Goffman Meets Online Dating: Exploring the 'Virtually' Socially Produced Self." *Journal of Social Informatics* 16: 6–20.
- Kelly, N., and A. Antonio. 2016. "Teacher Peer Support in Social Network Sites." *Teaching and Teacher Education* 56: 138–149. <https://doi.org/10.1016/j.tate.2016.02.007>.
- Kirkman, B. L., J. E. Mathieu, J. L. Cordery, B. Rosen, and M. Kukenberger. 2011. "Managing a New Collaborative Entity in Business Organizations: Understanding Organizational Communities of Practice Effectiveness." *Journal of Applied Psychology* 96 (6): 1234–1245. <https://doi.org/10.1037/a0024198>.
- Krutka, D. G., and J. P. Carpenter. 2016. "Participatory Learning Through Social Media: How and Why Social Studies Educators Use Twitter." *Contemporary Issues in Technology and Teacher Education* 16 (1): 38–59.
- Lantz-Andersson, A., M. Lundin, and N. Selwyn. 2018. "Twenty Years of Online Teacher Communities: A Systematic Review of Formally-Organized and Informally-Developed Professional Learning Groups." *Teaching and Teacher Education* 75: 302–315. <https://doi.org/10.1016/j.tate.2018.07.008>.
- Leary, M. R., and R. F. Baumeister. 2000. "The Nature and Function of Self-Esteem: Sociometer Theory." In *Advances in Experimental Social Psychology*, edited by M. P. Zanna, 1–62. San Diego, CA: Academic Press.
- Levinson, S. C. 1992. "Activity types and language." In *Talk at work: Interaction in institutional settings*, edited by P. Drew and J. Heritage, 66–100. Cambridge: Cambridge University Press.
- Li, L. C., J. M. Grimshaw, C. Nielsen, M. Judd, P. C. Coyte, and I. D. Graham. 2009. "Use of Communities of Practice in Business and Health Care Sectors: A Systematic Review." *Implementation Science* 4 (1). <https://doi.org/10.1186/1748-5908-4-27>.
- Macià, M., and I. García. 2016. "Informal Online Communities and Networks as a Source of Teacher Professional Development: A Review." *Teaching & Teacher Education* 55: 291–307. <https://doi.org/10.1016/j.tate.2016.01.021>.
- Malinowski, B. 1923. "The Problem of Meaning in Primitive Languages." In *The Meaning of Meaning*, edited by C. K. Ogden and I. A. Richards, 296–336. London: K. Paul.

- Manago, A. M., M. B. Graham, P. M. Greenfield, and G. Salimkhan. 2008. "Self-Presentation and Gender on MySpace." *Journal of Applied Developmental Psychology* 29 (6): 446–458. <https://doi.org/10.1016/j.appdev.2008.07.001>.
- Margolis, D. 1998. *The Fabric of Self: A Theory of Ethics and Emotions*. New Haven, London: Yale University Press.
- Martínez Álvarez, L., N. Boreas Calle, A. García Monge, J. I. Barbero González, M. Vaca Escribano, F. Abardía Colás, A. Hernández Martín, A. Miguel Aguado, and H. Rodríguez Campazas. 2010. "Una perspectiva escolar sobre la Educación Física: buscando procesos y entornos educadores." In *La Educación Física y el deporte en edad escolar: el giro reflexivo en la enseñanza*, Edited by L. M. Álvarez and R. Gómez, 137–167. Miño y Dávila: Buenos Aires.
- McDermott, R., and D. Archibald. 2010. "Harnessing Your Staff's Informal Networks." *Harvard Business Review* 88 (3): 82–9.
- McLaughlan, T. 2021. "Facilitating Factors in Cultivating Diverse Online Communities of Practice: A Case of International Teaching Assistants During the COVID-19 Crisis." *The International Journal of Information and Learning Technology* 38 (2): 177–195. <https://doi.org/10.1108/IJILT-05-2020-0074>.
- McMillan, D. W., and D. M. Chavis. 1986. "Sense of Community: A Definition and Theory." *Journal of Community Psychology* 14 (1): 6–23. [https://doi.org/10.1002/1520-6629\(198601\)14:1<6:AID-JCOP2290140103>3.0.CO;2-I](https://doi.org/10.1002/1520-6629(198601)14:1<6:AID-JCOP2290140103>3.0.CO;2-I).
- Miller, V. 2017. "Phatic Culture and the Status Quo: Reconsidering the Porpoise of Social Media Activism." *Convergence: The International Journal of Research into New Media Technologies* 23 (3): 251–269. <https://doi.org/10.1177/1354856515592512>.
- Mitton, C., C. E. Adair, E. McKenzie, S. Patten, B. Waye-Perry, and N. Smith. 2009. "Designing a Knowledge Transfer and Exchange Strategy for the Alberta Depression Initiative: Contributions of Qualitative Research with Key Stakeholders." *International Journal of Mental Health Systems* 3 (1): 11–21. <https://doi.org/10.1186/1752-4458-3-11>.
- Nahapiet, J., and S. Ghoshal. 1998. "Social Capital, Intellectual Capital, and the Organizational Advantage." *The Academy of Management Review* 23 (2): 242–266. <https://doi.org/10.2307/259373>.
- Nelson, T. H. 2009. "Teachers' Collaborative Inquiry and Professional Growth: Should We Be Optimistic?" *Science Education* 93 (3): 548–580. <https://doi.org/10.1002/sce.20302>.
- Parboosingh, J. I., V. A. Reed, J. C. Palmer, and H. H. Bernstein. 2011. "Enhancing Practice Improvement by Facilitating Practitioner Interactivity: New Roles for Providers of Continuing Medical Education." *Journal of Continuing Education in the Health Professions* 31 (2): 122–127. <https://doi.org/10.1002/chp.20116>.
- Patton, K., and M. Parker. 2017. "Teacher Education Communities of Practice: More Than a Culture of Collaboration." *Teaching and Teacher Education* 67: 351–360. <https://doi.org/10.1016/j.tate.2017.06.013>.
- Preece, J. 1999. "Empathy Online." *Virtual Reality* 4 (1): 74–84. <https://doi.org/10.1007/BF01434996>.
- Prestridge, S. 2009. "Teachers' Talk in Professional Development Activity That Supports Change in Their ICT Pedagogical Beliefs and Practices." *Teacher Development* 13 (1): 43–55. <https://doi.org/10.1080/13664530902858493>.
- Radovanovic, D., and M. Ragnedda. 2012. "Small Talk in the Digital Age: Making Sense of Phatic Post." In Paper presented at 2nd Workshop on Making Sense of Microposts, Lyon (France), 16–20 April. [Conference paper] <http://eprints.rclis.org/24377/>.
- Ren, Y., H. Harper, D. Drenner, T. Terveen, K. Kiesler, R. Riedl, and K. Kraut. 2012. "Building Member Attachment in Online Communities: Applying Theories of Group Identity and Interpersonal Bonds." *MIS Quarterly* 36 (3): 841–864. <https://doi.org/10.2307/41703483>.
- Ridder, H. G. 2017. "The Theory Contribution of Case Study Research Designs." *Business Research* 10 (2): 281–305. <https://doi.org/10.1007/s40685-017-0045-z>.
- Ridings, C. M., and D. Gefen. 2004. "Virtual Community Attraction: Why People Hang Out Online." *Journal of Computer-Mediated Communication* 10 (1): JCMC10110. <https://doi.org/10.1111/j.1083-6101.2004.tb00229.x>.
- Robson, J. 2018. "Performance, Structure and Ideal Identity." *British Journal of Educational Technology* 49 (3): 439–450. <https://doi.org/10.1111/bjet.12551>.

- Sassenberg, K. 2002. "Common Bond and Common Identity Groups on the Internet: Attachment and Normative Behavior in On-Topic and Off-Topic Chats." *Group Dynamics: Theory, Research & Practice* 6 (1): 27–37. <https://doi.org/10.1037/1089-2699.6.1.27>.
- Seo, K., and Y.-K. Han. 2013. "Online Teacher Collaboration: A Case Study of Voluntary Collaboration in a Teacher-Created Online Community." *KEDI Journal of Educational Policy* 10 (2): 221–242.
- Sparkes, A. 1992. "Reflexiones sobre las posibilidades y los problemas del proceso de cambio en la Educación Física." In *Nuevas perspectivas curriculares en Educación Física: la salud y los juegos modificados*, edited by J. Devis and C. Peiró, 251–266. Barcelona: Inde.
- Sproull, L., C. Conley, and J. Moon. 2013. "The Kindness of Strangers: Prosocial Behavior Online." In *The Social Net. Understanding Our Online Behavior*, edited by Y. Amichai-Hamburger, 143–164. Oxford, UK: Oxford University Press.
- Stake, R. E. 2010. *Qualitative Research: Studying How Things Work*. New York: Guilford Press.
- Stommel, W. 2009. *Entering an Online Support Group on Eating Disorders: A Discourse Analysis*. Amsterdam: Rodopi.
- Strauss, A. L., and J. Corbin. 2002. *Bases de la investigación cualitativa: técnicas y procedimientos para desarrollar la teoría fundada*. Medellín: Editorial Universidad de Antioquia.
- Swift, L. 2014. "Online Communities of Practice and Their Role in Educational Development: A Systematic Appraisal." *Community Practitioner: The Journal of the Community Practitioners' & Health Visitors' Association* 87 (4): 28–31.
- Tajfel, H. 1981. *Human Groups and Social Categories*. Cambridge: Cambridge University Press.
- Tseng, F. C., and F. Y. Kuo. 2014. "A Study of Social Participation and Knowledge Sharing in the Teachers' Online Professional Community of Practice." *Computers and Education* 72:37–47. <https://doi.org/10.1016/j.compedu.2013.10.005>.
- Tsiotakis, P., and A. Jimoyiannis. 2016. "Critical Factors Towards Analysing teachers' Presence in On-Line Learning Communities." *The Internet and Higher Education* 28: 45–58. <https://doi.org/10.1016/j.iheduc.2015.09.002>.
- Turner, J. W., J. A. Grube, and J. Meyers. 2001. "Developing an Optimal Match within Online Communities: An Exploration of CMC Support Communities and Traditional Support." *The Journal of Communication* 51 (2): 231–251. <https://doi.org/10.1111/j.1460-2466.2001.tb02879.x>.
- Vangrieken, K., C. Meredith, T. Packer, and E. Kyndt. 2017. "Teacher Communities as a Context for Professional Development: A Systematic Review." *Teaching and Teacher Education* 61:47–59. <https://doi.org/10.1016/j.tate.2016.10.001>.
- Vause, L. P. 2009. "Content and context: Professional Learning Communities in Mathematics." PhD diss., University of Toronto. https://tspace.library.utoronto.ca/bitstream/1807/19136/1/Vause_Lyn_P_200911_Ed.D_thesis.pdf.
- Visser, R. D., L. C. Evering, and D. E. Barrett. 2014. "Twitter for Teachers: The Implications of Twitter as a Self-Directed Professional Development Tool for K-12 Teachers." *Journal of Research on Technology in Education* 46 (4): 396–413. <https://doi.org/10.1080/15391523.2014.925694>.
- Wang, Y., and D. Fesenmaier. 2003. "Assessing Motivation of Contribution in Online Communities: An Empirical Investigation of an Online Travel Community." *Electronic Markets* 13 (1): 33–45. <https://doi.org/10.1080/1019678032000052934>.
- Wenger, E. 1998. *Communities of Practice: Learning, Meaning and Identity*. New York: Cambridge University Press.
- Wenger, E. 2011. *Communities of Practice: A Brief Introduction*. <https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/11736/A%20brief%20introduction%20to%20CoP.pdf?sequence=1&disAllowed=y>.
- Wong, J. L. N. 2010. "Searching for Good Practice in Teaching: A Comparison of Two Subject-Based Professional Learning Communities in a Secondary School in Shanghai." *Compare: A Journal of Comparative and International Education* 40 (5): 623–639. <https://doi.org/10.1080/03057920903553308>.
- Yoo, W.-S., K.-S. Suh, and M.-B. Lee. 2002. "Exploring the Factors Enhancing Member Participation in Virtual Communities." *Journal of Global Information Management* 10 (3): 55–71. <https://doi.org/10.4018/jgim.2002070104>.