EXPLORATION OF THE SOCIAL, TEACHING AND COGNITIVE PRESENCE OF THE STUDENT TEACHER IN THEIR LX ONLINE CLASSROOM

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Abstract

This study analyses student teachers' perceptions when teaching a foreign language and presenting in a virtual learning environment. Because of the COVID-19 pandemic, students on their initial teacher training programme were required to teach and present online for their end-of-module evaluation. Did the VLE help or inhibit their social, cognitive and teaching presence in the classroom? The impact of the virtual context is explored in the light of Horwitz's work on foreign language anxiety (1986) and Garrison et al. (1999) is also looked at in relation to their community of inquiry framework. A taxonomy of social, teaching and cognitive indicators was established, adding more detail on the emotion indicator of practitioners' social presence when teaching languages online. The implication for language teacher trainers is that student teachers need help to be able to control their emotions when being evaluated online and coping strategies need integrating into their programme of study.

Keywords: Foreign Language Anxiety (FLA), Virtual Learning Environment (VLE), Community of Inquiry (CoI), Online presence

1   INTRODUCTION

The health crisis of 2020 has been the cause of many changes in human activity and the world of education has not been spared. Not only have courses at many institutions switched from face-to-face to virtual mode, but end-of-year evaluations have also been modified in this way. At HEP-BEJUNE[1], students in their 3rd year of initial teacher training had to take their English micro-teaching exam in June 2020 in a virtual environment. Did they feel more comfortable during their evaluation of teaching English online or, on the contrary, would they have preferred to take their exam face-to-face? What impact has the virtual learning environment (VLE) had on the emotional aspect of their online social presence? The 1st year students, on the other hand, had to present a cultural element of the English-speaking world in groups of three in the same environment and similar questions about their experience can also be asked, which brings us to the research question of the present study:

Does the student teacher perceive the virtual context in their online L3 classroom as helping or inhibiting their social, teaching and cognitive presence?

1.   What indicators of the three kinds of virtual presence of the CoI model can be observed during an online assessment?
2.   What impact has the virtual learning environment (VLE) on the emotion indicator of their online social presence?
3.   When the level of anxiety fluctuates between face-to-face and VLE evaluations, what is the most prominent cause?

2   LITERATURE REVIEW

The Community of Inquiry (CoI) model originally created by Lipman (1991, 2003) is a framework that has already been used in several studies exploring the experience of online learning (Annand, 2011; Garrison, Cleveland-Innes & Fung, 2010). In this model, the teacher takes on several roles as defined in Garrison, Anderson and Archer (1999). They categorize the e-learning experience and subdivide it into the cognitive, social and teaching presence for the practitioner as well as the students (see Fig. 1). These three presences all interact to "improve the practice of using online conferencing in

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university education" (Garrison, Anderson & Archer, 2001, p.8). Annand (2011, p.1) helps us situate the CoI framework which "has transformed from describing a learning process in a socio-constructivist paradigm to a concept that can be tested empirically in an objectivist paradigm". We therefore no longer look at the process of co-construction which according to some critics of the CoI (Annand, 2011) is not the most effective to describe learning in a virtual environment but we are moving here towards an objectivist epistemology, given that this study explores how students felt during their final assessment.

As mentioned above, the CoI is not without its critics (Annand, 2011; Rourke and Kanuka, 2009). These claim that the learning does not happen according to the constituents of the model and that it does not go as deep as it should. Naturally, the model focuses on the learning process and not on its object whose evaluation can be measured. Although part of an objectivist epistemology, this project also succeeds in deepening our knowledge of the learning process by exploring more closely one of the more neglected aspects of social presence, emotions, as well as language anxiety, a phenomenon otherwise well documented in foreign language research. Social presence is only one of the three kinds of presence that support successful online learning, as shown in fig. 1, and this presence can be uniquely altered when the object is the teaching of a foreign language.

Fig.1: Elements of an educational experience (Garrison, Anderson, & Archer, 2001)

According to the CoI model, "social presence is indicated by the subcategories of emotional expression, open communication and group cohesion" (Cleveland-Innes & Campbell, 2012, p. 281). We will focus a little more on social presence in this project in terms of emotions and more particularly language anxiety (explained below), one of the emotions that has the greatest impact on the performance of students who will soon teach an L3. The development of new skills when transitioning to online education may itself elicit an emotional response (Cleveland-Innes & Campbell, 2012). This can often prove to be debilitating for the trainee (as well as the experienced practitioner) initially but become empowering when these skills are better mastered over time and use. Trying to introduce innovations in teaching without taking emotion into account is a mistake because it must be seen as part of the learning context (Lipman, 1991). Cleveland-Innes and Campbell (2012) note that emotion plays a much more dynamic role in learning than simply hindering rational thinking. It can also help in the formation of explicit memories (LeDoux, 1996) and this is even more the case when the object of learning is a foreign language.

Lipman (2003) mentions the emotion related to critical thinking within the CoI and shows that it cannot be dissociated from learning. Garrison, Anderson and Archer (1999, p. 99), on the other hand, speak of "the expression of emotion as one of the indicators of social presence". According to them, it is not only having the skill but also the self-confidence to be able to "express the emotions of the learning experience" as this can directly influence one's success. The loss of physical presence when teaching and learning online can then take the form of emoticons during messages exchanged in written

conversations (chat box). In the present study, this feeling of social and emotional connection was mentioned in the testimonies collected from the participants.

Turning now to the second aspect of our problem, several studies in research on language acquisition have shown that anxiety is probably the affective factor that most influences the learning of a foreign language, the other factor being motivation (Arnold & Brown, 1999; Bosmans & Hurd, 2016; Dörnyei, 2005; Horwitz et al., 1986). This is the reason why this emotion has taken on more and more importance in the literature on foreign language acquisition (for a review of this literature, see Al-Shboul, Ahmad, Nordin, & Rahman, 2013). Several data collection instruments have also been developed and used extensively and we will use one of them in this project, the Foreign Language Classroom Anxiety Scale (FLCAS) by Horwitz et al. (1986, p. 129).

From an L3 student to a trainee teacher, there is only one step, and this emotion is always present in future general practitioners who continue to work on their mastery of their L2 and L3 throughout their teacher training. This is therefore an essential variable to highlight and to confront with a potential increase or decrease in stress or anxiety due to the new virtual context. Conrad (2002) notes that anxiety is part of online learning, general anxiety coming here in addition to language anxiety. Fear and anxiety about the new learning environment is real (Zembylas, 2008), but the VLE can sometimes be an enabling rather than a debilitating factor when it comes to language anxiety, as explained below.

According to MacIntyre and Gregersen (2012), negative emotions such as worry and fear are included in language anxiety and are triggered by the simple fact of having to speak in the foreign language. If this anxiety is accompanied by a specific situation such as an exam or oral presentation, the effects can be cumulative (Ellis, 2008, p.691). Hurd (2007, p. 500) found in her study that studying a foreign language at a distance could, for some students (27%, so almost a third of the participants in her study) be less anxiety-provoking than having to speak the language in a traditional classroom in front of other people. However, it should not be deduced from this that language anxiety is always a negative emotion. Although most studies have found the debilitating effects of anxiety on language performance (see Horwitz, 2001 for a summary of the literature on these negative effects), some researchers such as Dörnyei (2005, p. 198) have found positive effects and have therefore called this anxiety 'facilitating'.

If we now want to bring these two aspects of our discussion together, Cleveland-Innes and Campbell (2012) argue that emotional presence is not just one of the indicators of social presence in the CoI model but that it underpins all online learning and could therefore be considered a presence in its own right. It may be premature to assert this emotional presence as a separate category for all online learning, but it may well be observable for foreign language learning, given the affective and emotional nature of the field which presents its own emotions such as enjoyment, motivation and anxiety. Lehman (2006, p.13) tells us about presence as "the dynamic interplay between emotion, behaviour, cognition and the environment". This will certainly be the case in the language classroom where emotion can positively or negatively influence other variables.

Annand (2011, p. 13) notes that "research based on the CoI model has so far not incorporated or sufficiently investigated student-initiated unstructured efforts on social presence". He adds that there is therefore a need to determine more precisely the relative influence of subcategories of the group's social presence on the learning process. We believe that exploring here one of the indicators of social presence, i.e., emotion, is a step towards this objective, all the more appropriate since it refers to an emotion well referenced in literature on foreign language acquisition. Garrison, Anderson and Archer (1999) themselves include the expression of emotions in their indicators of social presence and maintain that this can be a factor which directly contributes to the success of learning since participants are invited to project themselves as real people, both socially and emotionally during these online interactions.

3   METHODOLOGY

According to Annand (2011, pp. 1-2), "one of the means of research in tertiary distance education remains the CoI proposed by Garrison, Anderson, and Archer (1999)". He adds that the social presence category (see fig.1) is the "projection of the learner's personal characteristics into a community of inquiry (CoI) by, among other things, the expression of emotions". It is therefore a coding scheme inspired by Garrison, Anderson, and Archer (1999) that was used to analyze students'

feelings during their online assessment and to establish the resulting taxonomy and thus address our first research question. This scheme incorporates elements from the Foreign Language Classroom Anxiety Scale (FLCAS) developed by Horwitz et al. (1986, p. 129) to anchor the project in a language context, but not only. It is also a question of eliminating from the anxiety indicator a linguistic origin rather than a cause due to the virtual context, in order to better isolate this variable.

The data were obtained through four online questionnaires (SurveyMonkey) sent to all 1st and 3rd-year students who took the English option at HEP BEJUNE (two questionnaires per level), accompanied by the consent form and an information sheet about the project. Participants had the choice of responding in English or French, which is reflected in the quotes below which have been reproduced as is, without making any lexical or syntactic corrections.

The qualitative data were coded according to pre-established themes and a classification was then carried out by type of presence (social, cognitive or teacher). Perceptions and feelings about the virtual context are indicated through positive or negative indicators summarizing the participants' comments. Quantitative FLA data was then calculated, simply adding up the Likert scale scores for each participant and categorizing them into three anxiety levels, just as Cheng (2005) reported: low anxiety level of 10 % to 25%, moderate from 26% to 75% and high from 76% to 100%. As two of the FLCAS items were written negatively to avoid automated responses, these scores were reversed.

4 RESULTS

The 1st-year students were assessed on the quality and content of a presentation that did not require interaction. For the 3rd-year students, the evaluation being carried out in the form of a micro-teaching session, and therefore including an interactive element, we obtained much more negative results in terms of feelings towards the VLE. In general, the FLA level is moderate for all groups, with a slightly higher number of 3rd-year students experiencing language anxiety (see table 1). This is perhaps due to their mastery of L3 which is generally lower than in their 1st year; indeed, the B2 exam is far behind them, and the demands of their curriculum may prevent them from practicing their L3 as much as they would like or should do. Another reason may also be the greater difficulty of the oral production genre. It is indeed more difficult to interact (such as in a micro-teaching task for 3rd-year students) in an L3 than to speak continuously (such as in a presentation of a cultural aspect for the 1st-year students).

Table 1: Language Anxiety Levels (FLA)

FLA Level	1st Years	3rd Years	All Groups
Low	0%	0%	0%
Moderate	92%	83%	89%
High	8%	17%	11%

The second part of the questionnaire included a question requiring the listing of all possible causes of anxiety in descending order. For the 1st years, the level of language anxiety only came in second place among the sources of stress cited, coming directly after the exam situation which was the main source of anxiety for both groups. The use of technology came third and the format of the review (the fact that it is a presentation) last. Third-year students found online education more unsettling than their language anxiety, which shares third place with the use of technology. In order to synthesize the results of the qualitative data in the light of the CoI model, it is now essential to establish a taxonomy by kind of presence that the indicators describe.

	Positive Indicators	Citations (kept in their original format – some are in French)
Social Presence	Mutual aid	'No but there was someone in my group who knew how to edit video.'
	Deferred	'because we had the opportunity to start again as many times as needed.'
	Hidden, blurred	'l'évaluateur ressent moins mon stress' et 'je dois moins faire attention à ma posture (parler fort, faire

	Decreased stress	des gestes, etc.)' 'Le plus stressant est le regard des autres, chose que je n'ai pas ressenti avec l'ordinateur.'
		'j'étais chez moi dans un environnement que je connaissais et étais donc mois stressée que devant la classe avec 20 personnes.' 'I like teaching in the virtual environment because you can "hide" behind your computer.'
	Decreased anxiety	'I like presenting in the virtual environment because i feel confident doing it and it decreases my anxiety' 'So I think face to face is better for everything buuuuut I definitely prefer to sing in front of my laptop than in front of the class !' 'I don't like [teaching f2f] because I feel shy speaking in English.' 'I am more stressed [f2f] and I do lots of mistakes I wouldn't do normally.'
Cognitive Presence	Comprehension skills	Contexte virtuel préféré pour la compréhension à l'écrit et chansons
	Production Skills	'One exception is writing: writing online is faster and more efficient using computers.'
	Reflexion	'nous nous enregistrions et ensuite nous en voyions le résultat'
	No cognitive overload	'there are no people judging me in front of me. I find better my words like that'
	Creative thinking	'It also allows me to be more creative when presenting a subject.'
	Acquisition of new skills	'allowed me […] to get more comfortable with softwares which is something that I will cherish forever'
Teaching Presence	Vicarious presence	'we had to put together our video and the PowerPoint'
	Made easier	'I feel like it's easier for us to do things online but more difficult to follow what another person does online.'
	Blended teaching	'If I had a board or some material at home the online teaching would have been easier.
	Differentiation	'The teacher must find an alternative for those who don't have an access to it'
	Practical	'I can be at home (waking up later). I can work like I want, when I want' 'I can be in my bedroom with a cozy outfit drinking my coffee. Also, I gain time not having to go to school.'
	Training/practice	'Teaching in a virtual environment can be good and easy if we practice it.'
	Negative Indicators	**Citations (kept in their original format – some are in French)**
Social Presence	Diminished	'we can't see the reaction of people and the Interaction is not the same.' 'Interpersonal communication is more complex (and exhausting) when online.' 'Je préfère enseigner en présence, car il est plus facile d'interagir avec les élèves.' 'I kind of feel like I'm talking to a wall.'
	Absence of the non-verbal	'we were quite restrained (for example with the gesture)'
	Dehumanised	'il me manque la relation à l'humain, c'était plus

		difficile de communiquer à distance'
	Potentially harmful	'I think a high exposure to online communication ("for the sake of it") damages them more than anything.'
	Collaboration made more difficult	'C'est plus compliqué de réaliser un travail de groupe à distance selon moi.'
	Impacted by technical issues	'Sometimes the audio wasn't synchronized with the video so we missed a couple sentences.'
Cognitive Presence	Workings of the language	Présentiel choisi comme mode préféré pour la grammaire, le vocabulaire et les jeux
	Production skills	Présentiel choisi comme mode préféré pour travailler la production à l'oral et à l'écrit. 'For speaking and listening having a real human to talk to is more comfortable.'
	Comprehension skills	Présentiel choisi comme mode préféré pour travailler la compréhension à l'écrit et à l'oral
Teaching Presence	Decreased professionalism	'Pas vraiment besoin de faire attention à notre posture si on est assis.' (voir aussi l'indicateur *commode* ci-dessus qui pourrait être interprété comme manque de professionnalisme)
	Diminished classroom management possibilities	'J'aime bien présenter en face-à-face car il est plus simple de rendre la présentation intéressante et dynamique.' 'I don't like it because it's hard to think of way to make the students be actives and work together.'
	Artificial	'but they create "fake" learning conditions: I don't teach using these tools, not do I intend to (at least not as a primary environment).'
	Restricted	'I couldn't do exactly the exercise as I would have done it I was in a classroom (using the blackboard, make the students work in pair, etc)' 'And it removes one of the main canals: movement. Adults need it less, children can't learn without it.' 'because you are very limited (work in pairs, games, material, etc.)'
	Difficult training	Pour 60% des 3ème années 'I'm not used to teach online and I find it difficult to change our habits.'
	Difficult diagnosis	'c'est difficile de connaître les besoins des élèves.' '[teaching f2f] also allows a global view on the children, and the ability to analyze their attitudes and moods to offer interactive and efficient regulations.'
	Asocial	'teaching is a social skill. It implies too many physical communication to be rendered efficiently online.'
	Non-efficient	'My keyword is "efficiency", I think face-to-face teaching is more efficient. Online teaching is not inefficient, but requires a lot more time to bring anything worth it (for the teacher AND the student both).'

5   CONCLUSION

The present study answered several questions. The increased anxiety of students in assessment situations is partly due to the object of learning and teaching, at least in a more visible way for the third-year students. However, the root cause of stress remains the assessment situation, which is somewhat exacerbated by the context in which it takes place. A taxonomy of indicators shedding light on the three sorts of teacher presences was also established, especially for the emotional indicator of social presence, both in negative and positive terms. This allowed us to ascertain a more balanced view of the impact of the virtual context on the evaluation of teachers in training. Our knowledge of online social presence indicators has therefore increased thanks to the testimonials collected for this project.

The pandemic has created new challenges, both for teachers and their students. One of these challenges is to help our students control their emotions during online assessments and therefore to integrate learning strategies for this purpose. We need to think urgently about our reaction as educators. This involves building assessment strategies that will not exacerbate the problem, but which will take into account the negative emotions impacting their performance.

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