International Conference
ICT for Language Learning

The e-Factor in e-Collaborative Language and Translation Classes: Motivation, Metacognition, Empowerment

Viviana Gaballo[1]

Abstract

Over the past two decades, the growth of the Internet and the development of newer computer-mediated communication (CMC) technologies have multiplied opportunities for communicating in other languages beyond the traditional educational settings. Learners are stimulated by the sheer amount of contacts they can make with people all over the world, and are more motivated to acquire the cross-linguistic and cross-cultural skills they need to participate in global communication spaces.

This study focuses on the metacognitive awareness raised, motivation enhanced and empowerment fostered in the e-collaborative language and translation classes offered in the past fifteen years, after analyzing the forms of interaction, collaboration and co-construction of knowledge learners experienced online, as filtered through quantitative and qualitative analysis techniques applied to the data collected from learners' interactions and reports. The suggestion is that social practice in virtual environments can provide a theoretical lens that allows researchers to examine language and translation learning in ways that other perspectives do not.

Keywords: e-collaboration, translation and language learning, motivation, metacognition, empowerment

1. Theoretical framework

Recently, researchers have been focusing on how to incorporate the new Web trends into the learning process. Language-focused researchers have drawn on methods and key concepts from a variety of research traditions (including pragmatics, conversation analysis, sociolinguistics, genre analysis, and the ethnography of communication). Learning-focused researchers have tried to articulate some of the main theoretical perspectives in networked learning research (Social Constructivism, Actor Network Theory, Constructivism, Critical Theory, Action Research, Communities of Practice, STS, Scientific enquiry, Conversational framework, Philosophy of technology, Activity Theory, Anthropological views on tools, artefacts and technology.

Networked Learning (NL) has gained ground lately, although research into NL may be said to have started after the publication of Wenger's seminal study on Communities of Practice and Social Learning Systems [1]. Much of the work that followed was based upon theoretical perspectives such as social constructivism and social learning theory, as employed in course design. The amount of work that has developed since can be linked to the changes introduced by Web 2.0 in general, and Web 2.0 communities in particular, especially professional learning communities.

Recent research has been trying to focus on how to harness and apply Web 2.0 concepts to create new learning experiences and learn across communities. The underlying pattern is one of a shift from "push for learning" – the dominance of organization-driven models of learning – to "pull for learning" – a learner-driven demand for informal and lifelong learning, in which learners control what they learn, how they learn it, and with whom [2].

Aiming at a more active involvement of learners in the learning process, current Web 2.0-driven learning technologies focus on the perspective of learners. They allow learners to design their learning environments individually on the basis of given tools and services, giving them full control over the learning environment, support communication and collaboration with other learners [3], and, in sum, lead to a learning network of actors, artefacts (resources), and activities [4].

As regards collaboration and cooperation, which are particularly relevant to this study, an examination of the literature in this area suggests that researchers writing about online collaborative learning are often writing about cooperative learning instead, and vice versa. The two concepts often overlap in existing literature, and few scholars or practitioners have attempted to pinpoint them (e.g. McInnerney & Roberts [5]; Panitz [6]). It seems important, therefore, to ascertain the similarities and differences between collaboration and cooperation, and between the two and communication. Table 1 below summarizes such differences and similarities, e.g. as to the type of learning involved and learning

[1] University of Macerata (Italy)

relationship developed, how decisions are made and who's accountable, based on Misanchuk & Anderson's study [7].
The picture that is derived is one that exposes the complexity of collaborative learning contexts, in which the shared goal, agenda and accountability, together with the need for achieving consensus through social negotiation when making decisions, and the total interdependence of community/group members are all necessary conditions for the process of joint creation of knowledge to take place.

	Communication	*Cooperation*	*Collaboration*
Learning	Information transmission	Knowledge transmission	Knowledge generation
Inquiry	Individual inquiry	Delegation of tasks	Common inquiry
Decision-making	Agreement > < disagreement	Vote (majority rules)	Consensus through social negotiation
Goals / agendas	Multiple goals / multiple agendas	One goal / multiple agendas	One goal / one agenda
Accountability	Individual accountability	Individual accountability	Group accountability
Learning relationship	Complete independence	Partial interdependence	Complete interdependence

Figure 1 – Features of communication, cooperation and collaboration in learning contexts (Adapted from Misanchuk & Anderson, 2001)

Networked Learning is deeply rooted in constructivism [8] and is built on dialogue, collaboration and cooperation in the learning process, group work, interaction with online materials, and knowledge production (see figure 1). The idea of collaboration is perfectly depicted by the definition offered by Schrage [9], which underlies this study, "Collaboration is the process of shared creation: two or more individuals with complementary skills interacting to create a shared understanding that none has previously possessed or could have come to on their own."
One step beyond constructivism has been taken by another emerging theory that provides a context and background for this study: Connectivism [10]. "At its heart, connectivism is the thesis that knowledge is distributed across a network of connections, and therefore that learning consists of the ability to construct and traverse those networks" [11].
Connectivism is therefore understood as: "[…] a networked learning model that reflects the technological and societal changes of the twenty-first century. It recognizes that individuals learn by making connections within their neural networks, and that these can be strengthened by creating networks with other individuals and repositories of knowledge. It is our receptiveness to engage with these connections that enables us to learn." [12].

2. Methodological framework

The ultimate goal of language teaching and learning is learners' development of their language skills in such a way that they undergo fundamental changes towards metalinguistic control, rhetorical expressiveness, and a higher order of semantic flexibility, while continuing with the acquisition of linguistic knowledge in the lexical, morphological, syntactic and discourse domains. This permits cognitive control over the form of linguistic production, which implies the ability to select appropriate linguistic forms, morpho-syntactic constructions and lexical expressions, to weigh alternatives, and to access non-default, less productive, marked options.
In order to attain this goal, learners are provided with a learning environment in which they can contextualize and organize their learning. Knowledge emerges from the connections established, is then reformulated and re-organized in the individuals' minds, and brought back into the learning context for further discussion with other learners and consensual decision-making. As collaboration requires learners to do this in a group, it is fundamental that the interactions taking place among them are studied in order to understand "how a collaborative group as a whole constructs knowledge through joint activity in a CSCL setting" [13]. In this context joint knowledge construction is demonstrated by: flow of proposals, questioning, building common ground, maintaining a joint problem

space, establishing intersubjective meanings, positioning actors in evolving roles, building knowledge collaboratively, solving problems together [14].
The reference model adopted in the e-collaborative language and translation classes taught since 2004 is based on the synergetic integration of a learning-focused model, i.e. the OLAR CoPs model [15], and a language-focused model, i.e. the systemic-functional translation competence model [16].
Constructivist and experiential learning theories inspire the learning-focused model. The diagram in figure 2 depicts the model, inspired by Soller's Collaborative Learning Model as adapted by Calvani [17]. It includes dimensions and steps that integrate people and technology in order to create and maintain "a sound collaboration system, in which online learning organizations may engage in proactive learning, develop reflective practice and pursue continuous change for continuous improvement" [16]. The external pentagon identifies the preliminary, critical factors representing obstacles to the collaborative activity, i.e. unsuitable task, technological inadequacy, poor collaboration propensity, lack of domain expertise, and large gap in expertise. Next is an area meant for both technological familiarization and the solution of any preliminary issues in domain ownership (elementary lexis, shared vocabulary, expert/layman gap reduction). Then we enter the area where individuals begin to interact with each other in order to create a good social climate and shared culture (through social grounding, trust, mutual understanding, and self-esteem).

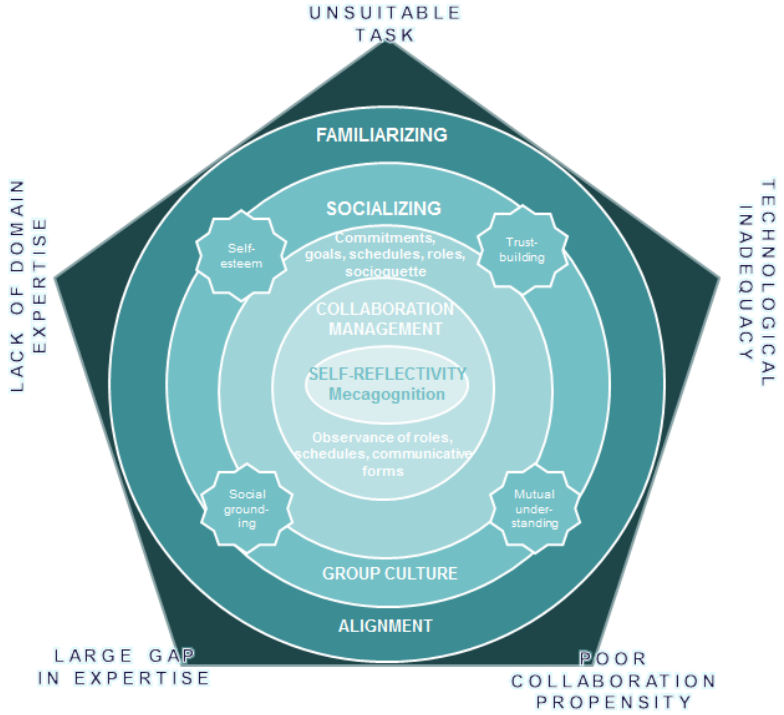

Figure 2 – e-Collaboration system model
(Soller's Collaborative Learning Model as adapted by Calvani 2005)

The fourth area more specifically concerns the commitments to be made in order to pursue an effective group model, consciously spelled out in a collaborative agreement or socioquette document (indicating types of goals, interactions, roles, schedules).
The collaborative management dimension concerns the actual management and observation of the collaborative process, and has the function to continue and consolidate the group's integration process. The inner dimension refers to the process of self-reflectivity, which, while expressed during the entire path, also requires a final moment of shared reflection by the group.
The use of CSCW (Computer-Supported Collaborative Work) technologies and the application of Action research principles lead participants to fully own their learning processes (as well as the learning methodology and technology used), so they can achieve the empowerment that is the overarching goal of the entire learning process.
The language-focused model refers to the competence model [16] developed to provide a systemic-functional view of translation competence. The model also proves to be extremely versatile in (1) pinpointing (dis-)continuity between teaching and learning in language classes and teaching and learning in translation classes, and (2) providing a useful, visual, quantitative and qualitative

representation of the learners' emergent profiles (see figure 4 –blue and pink outlines). The more rule-bound and grammar-oriented character of language learning is more likely to activate the linguistic, extra-linguistic and sociocognitive areas of the background competence with only some occasional tapping from the instrumental, professional and epistemological areas which, conversely, are fully targeted in the case of translation training (see figure 4 – downward-oriented "bell").

Figure 3 – A systemic functional model of translation competence (Viviana Gaballo © 2009)

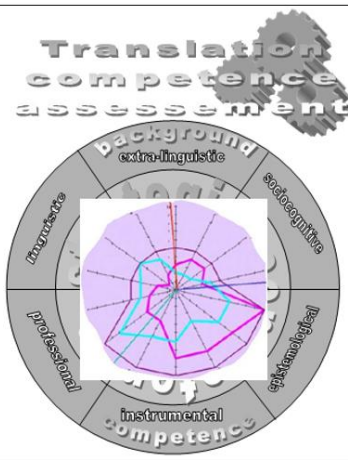

Figure 4 – Translation competence assessment mapped onto the systemic functional model (Viviana Gaballo © 2009)

To the purpose of this study, we will zoom in on the area of the systemic-functional competence model that will best offer food for thought, i.e. the sociocognitive competence. The social-cognitive abilities identified in the systemic-functional model (i.e. cognitive interpretive understanding and interpersonal perspective co-ordination) are constitutive of competent communicative action, which is "the ability of the self-reflective subject to justify action to those affected by it" [16]. Whenever the individual makes a choice within a specific discipline or life situation, or judges information as relevant or irrelevant, customary or anomalous, or decides about which way to go, s/he is taking responsibility of the choice made. It means taking on the burden of all the logical consequences that will follow, which prevents subjectivity and randomness. Within this system, great importance is also given to striking a fair balance between one's own independence of mind (which draws strength from the critical contribution of self-assessment) and the openness to integrate different contributions or even to modify one's own points of view.

3. Conclusions

Although Networked learning [18] does not privilege any particular view of learning, when NL is applied to language/translation learning contexts, the connections, relations, and meaning-making that are developed in virtual spaces contribute to a more holistic learning experience, where the notions of identity, "otherness" and intercultural awareness come most conspicuously into play. In such a framework, learners will best develop their language and translation competence through collaborative and cooperative learning models.

The design of the language courses referred in this study was intended to support a collaborative learning approach. The students were encouraged to work together and part of their assessment reflected this group work. Students enjoyed the experience of working with a networking technology and believed that it helped them to learn. Our account of learning outcomes is based on the students' perceived learning.

The students' activity was organized around joint problem-solving efforts manifested in the co-construction of solutions and referring to and expanding one another's ideas. Collaborative activity was such that boosted individual intrinsic and extrinsic motivation. As learners developed an autonomous learning strategy, the links between synchronous decision-making activities, asynchronous learning tasks, informal tasks in their own learning networks, and personal reflections on achievement became pivotal in "forging an empowering framework" [12].

Both quantitative and qualitative research was used to surface participants' perceptions of skills learning through online interaction and provided insights into the competences that the technology-enhanced learning environment facilitated.

The results of this study suggest that the consolidated application of the learning-focused and language-focused models mentioned above can significantly enhance students' language/translation competence and their communicative skills as EFL learners, while raising their motivation and networking skills. The research showed that contribution of learning motivation and metacognitive skills enhanced learners' systematic use of strategies that, in turn, supported their development as independent and empowered learners.

References

[1] Wenger, E., Communities of practice: Learning, meaning, and identity. Cambridge, Cambridge University Press, 1998.
[2] Thißen, D., Zimmermann V., & Küchler T., "Into the great wide open: responsive learning environments for personalised learning", in O'Donoghue, J., Technology-supported environments for personalized learning: methods and case studies, London, IGI Global, 2009.
[3] Mödritscher, F., Wild, F., "Sharing good practice through mash-up personal learning environments", in Advances in Web Based Learning, ICW, 2009, 245-254.
[4] Koper, R., Tattersall, C., eds., Learning Design: A handbook on modelling and delivering networked education and training, Berlin, Springer, 2005.
[5] McInnerney, J. M., Roberts, T. S., "Collaborative or Cooperative Learning?", in Tim S. Roberts, ed., Online Collaborative Learning, New York, IGI Global, 2004, 203-214.
[6] Panitz, T., "Collaborative versus cooperative learning - a comparison of the two concepts will help us to understand the underlying nature of interactive learning". Cooperative Learning and College Teaching. 1999:2, 2-13.
[7] Misanchuk, M., Anderson, T., Building community in an online environment: communication, cooperation and collaboration, in Proceedings of the Annual Mid-South Instructional Technology Conference, 2001.
[8] Jonassen, D. H., Peck K. L., Wilson, B, G., Learning with technology. A constructivist perspective, Denver, Prentice Hall, 1999.
[9] Schrage, M., Shared minds: the new technologies of collaboration, New York, Random House, 1990.
[10] Siemens, G., 2005, "Connectivism: A learning theory for the digital age. International Journal of Instructional Technology & Distance Learning". Accessed 10 January 2017: http://www.elearnspace.org/Articles/connectivism.htm
[11] Downes, S., 2007, "What connectivism is", Accessed 10 January 2017: http://www.downes.ca/post/38653.
[12] Hall, R., Mackenzie, S., Hall, M., "The Impact of Interactive and Collaborative Learning Activities", in O'Donoghue, J., Technology-supported environments for personalized learning: methods and case studies, New York, IGI Global, 2009, 128-148.
[13] Stahl, G., "How to study group cognition", in Puntambekar, S., et al., Analyzing Interactions in CSCL: Methods, Approaches and Issues, Springer, 2011.
[14] Blake, C. and Scanlon, E., "Analysing Collaborative Processes and Interaction Patterns in Online Discussions", in Eighth International Conference on Networked Learning, 2012.
[15] Gaballo, V., "OLAR-CoPs: A Model for On-Line Action Research Communities of Practice", in The 3rd International Multi-Conference on Society, Cybernetics and Informatics: IMSCI 2009 – Proceedings, Vol. 1, Orlando, Fla, IIIS – International Fed. Informatics and Systemics, 2009.
[16] Gaballo, V., "The umbilical cord cut: English as taught in translator-training programs", in Gaballo, V., ed., English in Translation Studies: Methodological perspectives, Macerata, EUM, 2009, 41-64.
[17] Calvani, A., Rete, Comunità e Conoscenza. Costruire e gestire dinamiche collaborative, Trento, Erickson, 2005.
[18] Gaballo, V., "New Challenges in Designing Second/Foreign Language Programs in a Networked World", in Gómez Chova L., Lopez Martinez A., Candel Torres I., eds., Technology, Education and Development. Barcelona (E), IATED, 2014, 4384-4391.