Exploration of Collaborative Online International Learning: Interactional and Intercultural Competence in Technologically Mediated Education Settings.

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Abstract

Collaborative online international learning (COIL) represents a form of blended on-line and off-line learning in which students attending universities in different countries produce collaborative projects as part of their regular coursework. Given the highly distributed, technologically mediated interactions that are required for successful COIL collaboration, in this paper we consider the importance of recognizing how student competences routinely linked to intercultural skills and abilities are better formulated in terms of interactional competence. In addition, we briefly consider how such interactional competence can be approached as comprising a wide range of complex multimodal and epistemic interactional practices. As with the notion that the mere provision of study-abroad opportunities inevitably results in students acquiring intercultural competence, we argue that technologically mediated teaching and learning requires careful consideration of a range of constraints as well as the often-lauded affordances.

Keywords 国際オンライン協働学習 相互行為能力 異文化能力 国際教育 マルチモダリティ 社会的相互作用/collaborative online international learning, interactional competence, intercultural competence, international education, multimodality, social interaction

1. Introduction

One of the key drivers for exploring change in globally focused education has been the growing recognition that merely providing study abroad opportunities with an expectation that they will, by default, provide with students and experiences that automatically confer cross-cultural awareness, intercultural competencies, communication skills and so forth (e.g., Lambert, 1994) is misplaced. More recently, it has become more clearly recognized that study abroad does not automatically confer positive social and cultural benefits without considerable attention directed toward how student experience may be modified and influenced by a wide range of psychological and social influences (e.g., Vande Berg, Paige & Lou, 2012). In this regard, collaborative online international learning (COIL) initiatives have sought to provide a means by which global competencies and skills can feature *in-and-as* elements of more traditionally taught coursework, including mechanisms by which assessment of such competencies can be reliably measured.

Online communication through web-based video, image and text-based tools is a key

component of many contemporary approaches to online or virtual learning programs, with COIL seeking to integrate these with traditional methods of teaching and learning provision. This approach, developed through the State University of New York (SUNY) following from the pioneering initiatives by Jon Rubin to undertake online, collaborative learning for students undertaking filmmaking courses, has come to be leader in development and support for COIL related activities globally (www.coil.suny.edu).

COIL is presented as a form of globally networked learning (GNL) that seeks to promote education internationalization. The essential elements of COIL are that it involves courses that are co-taught, involving students and educators located in different countries or areas, and involves an explicit focus on collaborative groupwork, often in the form of projects that comprise an integration of digital and physical materials. While early COIL exchanges were often explicitly focused on forms of cultural exchange primarily, contemporary COIL initiatives may have a more disciplinary, formal academic objectives. COIL is generally embedded as part of a course of study (e.g., six weeks of COIL may be undertaken in a 15-week semester) rather than comprising the entire course. Often beginning practitioners may undertake smallscale COIL activities, perhaps for two weeks substantial prior to developing more collaborations. In addition, undertaking COIL before, during, or after a more traditional study abroad or student exchange program has been growing in popularity.

In seeking to explore the practical and applied aspects of COIL, given that they could be invariably characterized \mathbf{as} involving technologically mediated human social interaction, consider that there has developed a considerable literature on learning using computer supported collaborative learning (CSCL), interaction and technology (Heath & Luff, 2000), and on technologies of system design (e.g., "technomethodology" as proposed by Dourish & Button, 1998), which take a decidedly interactional approach to understanding how technology gets used in real-world, particularized settings.

These ethnomethodologically informed approaches seek to understand and describe how technological systems, devices, and so forth are actually deployed, used, and understood with regard to the specific, local social settings in which their use is embedded. Now, while there is a considerable literature on the use of technology to support learning in online environments, there is less that is specific to COIL practice, although this is perhaps unsurprising as COIL does not represent a stand-alone method or technology of practice, and utilizes a range of technologies and pedagogies to undertake collaborative, group-based learning. In this paper, we will consider some aspects of the use of technology in highly diverse cross-cultural interactions for their implications in both the design and implementation of COIL and related teaching undertakings.

Here, we turn to a consideration of several concepts that might be considered as significant underpinnings to how COIL can be effectively undertaken, and consider some contemporary ethnomethodologically oriented research that might have practical utility in COIL development and provision. COIL (and other forms of online learning) routinely seek to engage participants in developing a range of skills and abilities, in particular those relating to intercultural competencies. In addition, it can be useful to consider how intercultural competence can be understood with regard to interactional competencies, particularly in consideration of interaction that is technologically mediated. Moreover, how such mediated interaction may be comprised of a wide range of multimodal interactive practices, with manv practices co-produced bv participants to display their epistemic stance and status.

2. Intercultural Competence

In a broad sense, intercultural competence seeks to encapsulate a complex range of multilingual and multicultural practices that involve cognitive, behavioral and affective skills and abilities to produce and understand meaningful communication between participants from differing cultural backgrounds. In practice it might appear that the principle concern is on establishing effective 'intercultural communication' skills and abilities. Given that university websites, corporate training programs for international companies and organizations, and a vast array of public sector policy documentation all seem intercultural communicative to reifv competencies, which seem to be in some way distant from the equally vast scholarly literature on the terms/concepts, these are on offer here as somewhat contentious definitions given the range of contemporary theoretical, empirical, and disciplinary debates. In this regard, a useful starting point might be Deardorff (2009) in order to get a sense of the tensions that have been explored across recent conceptual and empirical investigations.

Perhaps at the heart of the concept of intercultural competence, at least in pragmatic settings, is that individuals and groups having a primary cultural inheritance, can at least begin to consider how to understand, communicate, and interact with individuals and groups who do not share the same cultural heritage. In order to facilitate this in practice, this may involve explicating social norms to cultural members from the perspective of their own and other cultures, or more commonly a consideration of others culture and how it may be different or similar to one's own culture. This gives provides grounding for the observation that intercultural communication, perhaps alongside such things as intercultural awareness undertakings, has received perhaps the greatest attention, particularly in education contexts and settings in which skills and abilities relating to communication are often clearly prioritized as essential learning objectives across a range of undergraduate level programs of study.

3. Interactional Competence

Rather than simply assuming that knowledge of, or about, a particular culture might lead straightforwardly to some level of intercultural competence, there has been a growing emphasis towards understanding the importance of many interactional competencies that are associated with human social interactivity. One way of describing this is to suggest that having knowledge of a particular cultural norm does not enable an appreciation of the *doing* of any associated cultural practice. In this sense, interactional competence is a term that attempts to embed, or perhaps recast, the concept of intercultural competencies as being reflective of lived, embodied knowledge, skills and abilities (i.e., as *praxis*).

Interactional competence has been approached as involving a fundamental reformulation of conceptualizations key relating to communicative competence and intercultural competence that has been influential in second language learning and teaching (e.g., Young, 2011), and was developed following from concepts of interactive practices (Hall, 1993). Perhaps given the applied linguistic focus, the concept has been primarily employed to consider a range of discursive practices, there may be utility in considering the importance of non-verbal, embodied aspects that may be constitutive of effective interactional context particularly in technologically mediated settings such as those utilized by COIL. Briefly, examples of what might constitute interactional competence with regard to COIL (drawing from Young, 2008) include linguistic resources, identity resources, and interactional resources that are available to participants in a given interactive settings. Critically, these resources are utilized and deployed in given settings as contingent, co-produced practices. This is in contrast to earlier notions of intercultural competence as being primarily reflective of the knowledge or skills of individuals.

4. Multimodality

A considerable literature has developed that considers how participants engaging in online interactions (either synchronously or asynchronously) deploy a wide range of interactional modalities in order to achieve collaborative groupwork. Such modalities may include interactions that feature texts, emoticons, stamps, and photo exchanges that are now ubiquitous in social media apps and services (e.g., Bourlai & Herring, 2014; Chen et al., 2015; Ge & Herring, 2018; González-Lloret, 2011) as well as verbal resources such as laughter (Ikeda & Bysouth, 2013a), eye gaze and bodily conducts (Ikeda & Bysouth, 2017).

Multimodality in interaction, or the use of a range of modes of communication, is of critical importance when considering how technology can afford or constrain collaborative interaction. For one example of affordance, consider that when moving from voice only online interaction to online video interaction there is an increase in the interactive 'degrees of freedom' that interactants have available. However, as a constraint, consider how moving from face-to-face settings (e.g., classroom based) to online only settings may limit participant interaction. Further, in settings and contexts in which participants may be using a second language (L2) as the primary mode of communication there may well be additional constraints in addition to the technological (e.g., Ikeda & Bysouth, 2013b).

What this may underscore is that both in research and in practice, there may be considerable focus on speech exchange in the doing of intercultural competence and interactional competence, but less attention has been traditionally directed towards other interactional practices relating to interactional competence. One example of the growing awareness of the importance of multimodal resources can be found in the study of the practices of smiling and laughter as important multimodal resources (e.g., Ikeda & Bysouth, 2013a; Attardo et al., 2013). While space precludes a detailed account of these practices here, it is important to consider that the growing scholarship on multimodality has led to at least one strong claim that multimodal interactional practices should be considered as comprising an essential element of interactional competence, and that they should be considered as equally important as linguistic practices (Ikeda & Bysouth, 2017).

For example, Ikeda and Bysouth (2017) investigated how L2 speakers of Japanese engaged in group interaction when utilizing a range of IT tools (iPad, desktop PC's, BIGPAD) to collaborate on group-based projects. In this research, what was of interest was how various linguistic resources (i.e., Japanese, English, or other languages available to the participants) and non-linguistic modalities were used in order to undertake collaborative group projects.

It is important to note here that some approaches to these issues take a more technologically driven orientation with an explicit focus on tool use, with Turner (2012) providing a summary of empirical and theoretical approaches that consider such things as personalization (i.e., how users may modify tools to reflect personal or group identity), customization (i.e., how users can alter systems for ease of use) and appropriation (i.e., when tools and services are used in ways other than those anticipated by a designer; Dourish, 2003).

One quick way to gloss this is to consider that for a given IT tool there may be a range of different practices that users may orient to, in that one tool may be utilized in a very different way for one user than another. In other words, it is important to consider that for an instructor or course designer that assumptions about how a particular IT tool may be used by students' need to be flexible, in that the practices associated with the use of the tools are part of a complex ecology of the setting (e.g., Goodwin, 2013). In COIL settings and contexts this will involve linguistic, multimodal resources.

5. Epistemics in Interaction

Perhaps of some further interest as another focus with regard to multimodality in technologically mediated interactions, has been on investigations of the interactive display of epistemic status. In short, how people demonstrate to one another they understand, or do not understand, what another participant mean, intends or is doing. While epistemics is often considered to be mainly in the domain of verbal interactions, participants frequently employ numerous embodied practices to display to each other their epistemic statuses, and this may be of considerable importance when considering technologically mediated interactivity. A growing interest in epistemics in social interaction is perhaps closely tied to the development and implementation of online learning and assessment tools and services,

with educators seeking to understand how to better afford for technologically mediated learning environments in which multiple participants, often from diverse linguistic and cultural backgrounds, can better understand each other.

As one example of work seeking to explore the range of practices and modalities previously discussed, our research (Bysouth & Ikeda, 2014; Bysouth 2016) on synchronous video interactions provides a number of empirical instances of a range of these practices and how such practices may be of relevance for undertaking COIL related activities. In this research. Skype video meetings were undertaken as part of a COIL program in which participants were required to engage in collaborative group discussions and activities related to the development of basic level intercultural communicative competence and cross-cultural awareness. Participants in these sessions spoke a wide range of languages (e.g., English, Spanish, Japanese, Thai) and were physically located in several countries and time-zones (e.g., North American, Asia-Pacific, Europe). Analysis explored how participants managed to produce and recognize a range of constraints epistemic and affordances, notwithstanding their minimal experience of multiparty video-mediated interactions, and examined how participants were able to employ a range of explicitly embodied practices (e.g., visual availability during video exchanges, gesture, and affect displays produced to be visually and audibly available to interactants) in order to complete activities in cross-cultural interactions.

In addition, in COIL settings in which students are explicitly required to collaborate on the production of group projects, students may have difficulties in establishing 'epistemic primacy' (Stivers, Mondada & Steensig, 2011) among members. In short, who has the rights and responsibilities to know, or to ask questions (that may demonstrate lack of knowledge), or to initiate various task-based activities? While students may generally accord epistemic primacy to instructors (e.g., instructor questions given are to assess student knowledge rather than to inform the instructor about something unknown to them), this can be problematic in settings in which an instructor has no specialized skills or knowledge relating to a particular project topic, or when pedagogy involves opportunities for students to reflect on highly personal self and others cultural experiences. This is also likely to be more pronounced in asynchronous COIL activities which are primarily student led, with minimal instructor oversight of the actual pragmatic group interactions. Moreover, consider issues arising in settings in which the primary language of teaching is for many participants an L2 and that may involve crosscultural/intercultural interactions with participants who do not have English as L1. As difficulties example, consider the one associated with teaching that occurs in English-medium settings in Japanese cultural contexts. When these are transplanted into virtual, online exchanges, there are likely to be a number of challenges for participants to engage in effective group collaboration.

6. Conclusion

Given that there is a considerable premium (and perhaps expectation) that students develop effective groupwork skills and abilities, that they can work collaboratively, there remain challenges for determining how students and educators can acquire such skills in online settings. As with the notion that merely proving study abroad experiences will lead to increased intercultural awareness or intercultural communication skills, assuming that technology can provide for these by default is likely to prove unproductive. For example, while there have been decades of research exploring the social psychological aspects of small group dynamics in a diverse face-to-face range of settings and environments, there is a growing need for more detailed studies of those that feature such activities in online (both synchronous and asynchronous) settings. As just one example, some have suggested that participants in online learning can profit from adopting particular philosophical orientations to what they are engaged with, by for example avoiding the use of employing *'information* conceptualizations of transmission' the processes of online exchange, and adopting a more 'social constructionist' perspective (Kaye & Barrett, 2018).

In short, it may be that with growing use of ICT and COIL and COIL related approaches, we may need to fundamentally reconsider perhaps taken for granted approaches to teaching. learning and human social interaction in order to adequately take account of technologically whether mediated interaction can be conceptualized \mathbf{as}

essentially involving the technological extension towards existing practices, or perhaps as representing new forms of human interactivity.

In moving away from the notion that proving study abroad opportunities for students (those with the financial and social capital to participate) will inevitably provide those students with intercultural skills and abilities. there has been a shift toward explorations of how pedagogy that is concerned with intercultural themes and issues needs to consider a range of related domains of human conduct. In addition, with the growing use of widely available ICT tools and services in facilitating virtual 'study abroad' experiences through such things as COIL, which seek to integrate both online and traditional face-toface practices, there has been an appreciable increase in research focus on the technologically mediated aspects of culture by way of explorations of intercultural pragmatics, interactional competence, modalities of communication, and how knowledge is constructed and evaluated as relevant in highly diverse cultural settings.

References

- Attardo, S., Pickering, L., Lomotey, F. and Menjo, S. (2013). "Multimodality in Conversational Humor," Review of Cognitive Linguistics, 11(2), pp.400-414.
 - Bourlai, E. and Herring, S.C. (2014). "Multimodal Communication on Tumblr: I Have So Many Feels!" in Proceedings of the 2014 ACM Conference on Web Science New York, ACM Press, pp.171–175.

- Bysouth, D. (2016). "Cross-cultural Epistemic Displays in Technologically Mediated Interactions",『大阪大学大学院人間科学研 究科起用』第 42 巻 2016 年 pp.209-234.
- Bysouth, D. and Ikeda, K. (2014). "Cross-Cultural Epistemic Displays in Multiple Participant Synchronous Video-mediated Interactions," paper presented at Skype Connections and the Gaze of Friendship and Family Conference, Microsoft Research Cambridge, Cambridge, United Kingdom (June 3-4).
- Chen, Y.Y., Bentley, F., Holz, C. and Xu, C. (2015). "Sharing (and Discussing) the Moment: The Conversations that Occur Around Shared Mobile Media," in Proceedings of Mobile HCI 2015.
- Deardorff, D. (Ed.). (2009). "The SAGE Handbook of Intercultural Competence", Sage.
- Dourish, P. and Button, G. (1998). "On "Technomethodology": Foundational Relationships Between Ethnomethodology and System Design," Human-Computer Interaction, 13(4), pp.395-432.
- Dourish, P. (2003). "The Appropriation of Interactive Technologies: Some Lessons from Placeless Documents," Computer Supported Cooperative Work, 12, pp.465– 490.
- Ge, J. and Herring, S. C. (2018).
 "Communicative Functions of Emoji Sequences on Sina Weibo," First Monday, 23(11) (5 November).
- González-Lloret, M. (2011). "Conversation Analysis of Computer-mediated Communication," CALICO Journal, 28(2), pp.308-325.
- Goodwin, C. (2013). "The Co-operative, Transformative Organization of Human

Action and Knowledge," Journal of Pragmatics, 46(1), pp.8-23.

- Hall, J.K. (1993). "The Role of Oral Practices in the Accomplishment of our Everyday Lives: The Sociocultural Dimension of Interaction with Implications for the Learning of Another Language," Applied Linguistics, 14, pp.145-166.
- Heath, C. and Luff, P. (2000). "Technology in Action", Cambridge University Press.
- Ikeda, K. and Bysouth D. (2017). "Multimodal interactional competence in the use of technology in L2 Japanese classrooms," In Tateyama, Y., Ishida, M. and Greer, T. (Eds.). Interactional Competence in Japanese as an Additional Language, National Foreign Language Resource Center.
- Ikeda, K. and Bysouth, D. (2013a). "Laughter and turn-taking: Warranting next speakership in multiparty interaction," in Glenn, P. and Holt, L. (Eds.). Studies of Laughter in Interaction, Continuum, pp.39-64.
- Ikeda, K. and Bysouth, D. (2013b). "Japanese and English as lingua francas: Language choices for international students in contemporary Japan," in Haberland, H., Lønsmann, D. and Preisler, B. (Eds.).
 Language Alternation, Language Choice and Language Encounter in International Tertiary Education, Springer Publishers, pp.31-52.
- Kaye H. and Barrett J. (2018). "Making online teams work," in Baxter, J., Callaghan, G. and McAvoy, J. (Eds.). Creativity and Critique in Online Learning, Palgrave Macmillan.

- Lambert, R. (Ed.). (1994). "Educational Exchange and Global Competence", Council on International Education.
- Stivers, T., Mondada, L. and Steensig, J. (2011). "Knowledge, morality and affiliation in social interaction," in Stivers, T., Mondada, L. and Steensig, J. (Eds.). The Morality of Knowledge in Conversation, Cambridge University Press, pp. 3-24.
- Turner, P. (2012). "Outlining Epistemic Interaction," in Proceedings of the 30th European Conference on Cognitive Ergonomics, pp.85-91 (August 28).
- Vande Berg, M., Paige, R.M. and Lou, K.H. (Eds.). (2012). "Student Learning Abroad: What Our Students Are Learning, What They're Not, and What We Can Do About It", Stylus Publishing, LLC.
- Young, R.F. (2011). "Interactional competence in language learning, teaching, and testing," in Hinkel, E. (Ed.). Handbook of Research in Second Language Teaching and Learning (Vol. 2), Routledge. pp.426-443.
- Young, R.F. (2008). "Language and Interaction: An Advanced Resource Book", Routledge.