Critical incidents and cultures-of-use in a Hong Kong–Germany telecollaboration

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Abstract

This study explores critical incidents regarding differing cultures-of-use in telecollaboration against the backdrop of Hong Kong and German teacher education contexts. The rationale for the exchange was to model technology use and task design with the ultimate goal of internationalizing teacher education and supporting global citizenship. Participants in this project are 58 English majors in a graduate-level sociolinguistics course at a public research institution in Hong Kong and 15 EFL student teachers in a language teaching and new media elective course at a public education university in Germany.

Using social media tools for interaction such as Facebook, Skype, WeChat, and WhatsApp, 11 telecollaborative teams engaged in three sequential tasks: (a) engaging in topical exchanges using Facebook, (b) writing a literature review in Google Docs, and (c) making recommendations on team websites using Wix. Research questions focus on critical incidents identified by participants during these tasks, particularly in relation to tool engagement. Data triangulation includes reflections, surveys, and online interactions. Findings indicate that the majority of Hong Kong teams cite low experience with certain tools, unfamiliarity with alternative tools (e.g., WeChat), and differences in tool access and use as constraints in achieving effective communication. Implications address sensitizing participants to their partners’ tool socialization through implementing the critical incident technique.

Keywords: Telecollaboration, cultures-of-use, critical incidents, social media

Language(s) Learned in This Study: English


Introduction

This case study presents an overview of research on critical incidents (CI) and cultures-of-use, in particular how they pertain to telecollaboration. An examination of participants’ use of social media tools, the impact of such use on their exchanges, and participants’ reflections on their participation against the backdrop of socio-institutional contexts in Hong Kong and Germany are included. The ultimate goal of this telecollaboration, in which English is the lingua franca, is to advance internationalization of teacher education in Hong Kong by providing participants with an opportunity to learn about different educational contexts through sharing knowledge and co-constructing projects (Sadler & Dooly, 2016) with students in a different educational context—in this case, Germany. The study follows a socio-cultural approach grounded in the belief that “social activity is the process through which human cognition is formed” (Lantolf & Johnson, 2007, p. 878; Wertsch, 1994). Similarly, van Lier (2004) has argued that the “fuel for learning” is “engagement,” not input or output (p. 98); thus, the social nature of telecollaboration supports students’ linguistic and cultural engagement with cross-institutional partners. Moreover, fostering engagement in a Hong Kong–Germany telecollaboration for student teachers of English serves to heighten participants’ awareness of fundamentally different educational and socio-institutional contexts and how to meet related challenges.
Interactional conflicts (O’Dowd & Ritter, 2006; Schneider & von der Emde, 2006) and “missed communication” (Ware, 2005, p. 64) have been well documented in the literature on telecollaboration in higher education contexts that are less divergent in geography and culture than those in this study, such as exchanges between European countries and the US. Such conflicts can become more pronounced, however, in exchanges between East and West, where grading and assessment policies can be vastly different. To assess these wider differences, the author, who was the researcher and instructor in this study, uses a critical incident technique (CIT) approach to telecollaboration research to explore such differences in more detail while, at the same time, emphasizing the importance of CIT as a method for participants to notice and problematize such events (Brookfield, 2017; Tripp, 2012) in a way that helps identify solutions for such situations.

In line with the Hong Kong university’s slogan of “discovery and innovation,” the telecollaborative tasks (Appendix A) in this study are designed to promote critical thinking from a global and collaborative perspective (HK, China and Germany) by capitalizing on technological and social networking tools (Facebook, Google Docs, and Wix). This agrees with Kern’s (2014) call for a “relational pedagogy” that focuses on a set of heuristics aimed at helping participants learn to pay critical attention to relations among norms, contexts, meanings, and ideologies (p. 353).

**Background**

**Cultures-of-Use in Telecollaboration**

Telecollaboration, which has its roots in Western contexts, is well into its third decade of practice in that culture (Warschauer, 1995; see also the collected volumes by Belz & Thorne, 2006; Jager, Kurek, & O’Rourke, 2016; Lewis, 2017), but interest in the Asia-Pacific region (e.g., Chaudhuri, 2011; Liaw & English; 2017; Park, 2014; see also Chun, 2014) and Middle Eastern contexts (e.g., O’Dowd & Lewis, 2016) has been increasing. As Thorne (2016a) broadly defines it, one of the goals of telecollaboration is “global citizenship,” or a “heightened capacity for interconnectedness and empathy” (p. ix). Thus, this study seeks to explore critical incidents (CIs) identified by participants in relation to cultures-of-use (Thorne, 2003) in Hong Kong and German socio-institutional contexts. In recently revisiting his article, Thorne (2016b) has noted that “[a]s people interact with tools across contexts and time, the tools are inscribed with variable meanings, values, and conventionalized functions for different communities. [...] the cultures-of-use framework provides a lens through which to explore, and potentially to pedagogically address, tool socialization and its variabilities and consistencies” (pp. 185, 188). In this study, the role of the different socio-institutional contexts of Hong Kong and Germany were observed, as expressed by participants’ individual and team reflections on the social media tools used and such tools’ effect on collaboration processes and products.

**Social Media Tools and Community Building**

The impact of different social media tools on community building has been studied by a number of scholars, and the positive effect of synchronous communication was emphasized by a US-based telecollaboration in teacher education study (Lord & Lomicka, 2008). Though Lord and Lomicka (2008) found that online chat was perceived as comparable to face-to-face communication in its spirit and community by participants, varying technology can turn out to be a constraining, rather than an enabling, factor for intercultural communication. Based on findings from a French–U.S. telecollaboration, Kramsch and Thorne (2002) have argued for the need to transfer genres of local education systems into global learning contexts with different global communicative practices. In another study, Malinowski and Kramsch (2014) looked at two cases of recorded, verbalized, and drawn “ambiguous moments” (p. 161, emphasis in the original) during synchronous desktop video conferencing between two French learners in the US and their tutors in France. For Malinowski and Kramsch, such moments provide opportunities to embrace, rather than resolve or dismiss, paradoxes, contradictions, or conflicts that are inherent in meaning-making activity. They found that while computer-mediated communication can bridge the geographical distance between participants,
it also can be precisely this engagement with the technology itself that can hinder “deeper negotiation of social and cultural meanings, let alone worldviews” (p. 175). The pedagogical rationale in this study is to expose future language teachers to different social media tools through experiential learning so they can explore these tools’ social and technological affordances for their own language teaching contexts.

Critical Incidents in Teacher Education

CIT, an evaluation technique that was first used in 1941 to evaluate pilot suitability for flight training, was introduced into social studies by Flanagan (1954), who defines a CI as:

any observable human activity that is sufficiently complete in itself to permit inferences and prediction to be made about the person performing the act. To be critical, an incident must occur in a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects (p. 327).

According to Brookfield (2017), the element of criticality adds the “sustained and intentional process of identifying and checking accuracy and validity of our teaching assumptions” of a critical incident (p. 3).

CIT has been used in teacher education (Farrell & Baecher, 2017; Finch, 2010). A critical incident (CI) interrupts typical, expected procedures in what we usually take for granted in teaching (Farrell, 2007); for example, Farrell and Baecher (2017), discuss 40 CIs experienced by novice K–12 TESOL teachers and offer recommendations for teaching the four skills (e.g., getting shy students to speak up) and managing one’s classroom (e.g., L1 use, establishing routines, and rewards). Moreover, in L2 learning, CIT has been implemented to help teachers reflect on and improve their practice by identifying preconceived notions and reflecting on the importance of unplanned incidents; in addition, learners’ noticing of a potential CIT is a prerequisite “for triggering or realization to take place and to influence subsequent learning” (Finch, 2010, p. 422).

In addition to increasing its role in teacher education, interest in employing CIT to examine students’ responses in online contexts is growing (Glowacki-Dudka & Barnett, 2007). For example, Phelan (2012) draws on Brookfield’s (2017) CI questionnaire to evaluate learning opportunities in online teaching, finding that the practice of sharing answers anonymously may have aided in promoting a sense of a shared learning community, a result that could be particularly valuable in asynchronous online learning environments where students are in different geographical locations. Some researchers have explored CIT in telecollaboration. Belz (2004) notes in her analysis of formal versus informal forms of address in a US–Germany L2 telecollaboration that: “It appears that Gabi’s directive to ‘call her T’ constituted for Joe a critical incident with respect to T vs. V use” (Belz, 2004, n.p.). In a study of a Poland–Germany teacher education exchange, the authors looked at CIs as “events which changed their perceptions and attitudes in the course of the exchange,” which included aspects such as partner culture or problems encountered (Turula & Raith, 2015, p. 31). Recently, in their telecollaboration user manual for teacher trainers, Müller-Hartmann and O’Dowd (2017) and their EVALUATE4 team colleagues state that students can “learn from both positive and negative experiences (‘critical incidents’)” (p. 22). The application of CIT, in fact, seems appropriate in traditional classrooms—and even more important in telecollaboration, where interactional challenges can be amplified and misinterpreted, especially when telecollaborating across different socio-institutional and learning contexts, as the present study discusses.

Socio-Institutional Parameters

An analysis of CIs in telecollaboration must also take into consideration the larger socio-institutional contexts of participating institutions. External parameters, such as the alignment of curricular factors and accommodation of differing learning cultures, particularly across Eastern and Western countries, are significant elements in telecollaborative success.

Hong Kong has traditionally been known as an exam-based learning culture, emphasizing established academic criteria; German higher education, however, generally grants professors academic freedom, which means that instructors in Germany have flexibility regarding course contents and assessments.
Similar discrepancies in curricular alignment have been recognized in several studies. In a project in which learners of German in Hong Kong worked with tutors in Germany, a central challenge was to align the concrete goals and curricular needs for both contexts (Chaudhuri, 2011). In an earlier study about a telecollaboration project between the US and Hong Kong, Greenfield (2003) concluded that while Hong Kong ESL learners found the telecollaboration enjoyable, it was not clear to them how the project helped them improve on standardized, exam-related skills such as grammar and discrete language functions. The influence of learning culture shaped the author’s assignments and assessments as well in that she aimed to strike a balance between individual assessments (which were incorporated into a literature review in Task 2, see Appendix A for details) and collaborative assessments (which were incorporated into a team website in Task 3, see Appendix A for details).

Another socio-institutional parameter presented in the present study was the asymmetry in participant numbers (58 Hong Kong students compared to 15 German students). In addition, a previous study of an exchange between a TESOL methodology class in Korea and U.S. undergraduate learners of Korean reported “divergent participatory patterns” between the Korean and U.S. groups arising from the differences within the institutional setting, identities, and cultural values (Park, 2014, p. 181).

In evaluating the successful functioning of the communication tools used across the teams, this case study investigated what students in Hong Kong and Germany perceived as CIs in their engagement. The research questions are as follows:

1. What were participants’ prior experiences, proficiencies, and project expectations, particularly with regard to technology tools?
2. What critical incidents were identified? What are Hong Kong participants’ perceptions regarding the telecollaboration processes and products (particularly the tools)?

**Methodology**

Telecollaborative exchanges are, by definition, situated in specific learning contexts. This study adopts a case study approach (Dooly & O’Dowd, 2012) and incorporates key characteristics of ethnography, such as the author’s role as a participant observer in her dual functions as a co-designer of the course (with her colleague in Germany) and as the instructor in the Hong Kong context.

The author brought a mix of emic and etic perspectives to the project; while she had lived and taught in the Asian context for only a year at the time the project began, she had wide-ranging prior telecollaboration experience and had approached her counterpart in Germany about the project based on their collaboration since 2002. This association is in accord with best practices for telecollaborative, international, collegial teaching that is based on what has been described as “pedagogical and socio-institutional understanding between teaching partners” (Belz & Müller-Hartmann, 2003, p. 86).

Drawing on Brookfield’s (2017) notion of the critical reflective teacher and Tripp’s (2012) learning loop for reflective practice, the present study incorporates principles of the CIT, as described in the author’s Magnifying Glass (MG) reflection guidelines (Appendix B). This MG reflection took place during Week 9 of class and consisted of the following three parts for the Hong Kong (hereinafter HKs) teams:

- answer reflective questions in writing about content learned;
- draw a mind map (large picture) and focus on and analyze a self-identified CI (inset picture drawn on the back of the mind map); and
- interpret results to achieve improved performance.

HK teams discussed their results in their class. Representative examples from Team 2, Team 4, Team 7, and Team 10) are shown in Appendices E–H. The German (hereinafter DE) teams also discussed their results in their class.

In the context of teacher education, the purpose was to place the telecollaborative teams’ CIs in the larger
context of their telecollaboration and to understand and articulate the affective side of CIs (see Farrell, 2007). In CIT, progressively focusing and enlarging is important in developing useful details and in critiquing the CIs (Tripp, 2012; Czura, 2017). In the present study, eliciting information about what students considered significant was done face-to-face in teams. Using this format, as team members provide different knowledge and perspectives about a topic, they can best analyze CIs and model intellectual inquiry by asking questions and seeking to understand differences and disagree respectfully (Brookfield, 2017).

The key aspects of this ethnographic research are presented in the following sections, which include a detailed description of participants (researcher status, participant selection), curricular contexts (outcomes, tools, tasks), and data collection and analysis (Nunan, 1992).

Participants

As shown in Table 1, participants in this project comprised 58 English majors enrolled in a postgraduate core course, Language in Its Social Context, at a public research institution in Hong Kong, and 15 student teachers in a master’s-level language teaching elective called English Language Teaching and New Media in a program for primary and secondary EFL teacher education at a public education university in Heidelberg, Germany (n = 73).

Table 1. Telecollaborative Teams and Topics: Total, HK, and DE

<table>
<thead>
<tr>
<th>Telecollaborative Teams, Topics (Student Numbers)</th>
<th>*</th>
<th>DE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 EMI versus CLIL in secondary education</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>2 Critical reading and writing skills</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>3 ELT job discrimination</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>4 Impact of dialect in teaching</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>5 ELT in China/Germany</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>6 Language policy</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>7 Emojis in communication</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>8 Gender stereotypes in textbooks</td>
<td>8</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>9 Disney versus China’s Mulan*</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>10 EFL writing differences</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>11 Different teaching approaches</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: *The 1998 Disney film Mulan; the Chinese version is from 2009.

Of the 58 students in HK, six were literature majors and 52 were TESL majors (including one PhD student). The 15 DE students were all EFL student teachers. The HK course was divided into two sections held at different times on Thursdays. There were 36 students in the afternoon section, who made up Teams 1–7 and 22 in the evening session, who made up Teams 8–11. Of the 58 HK students, nine were from Hong Kong; the remaining 49 were from mainland China and some commuted to HK to participate in the MA programs. Team 11 was comprised solely of HK students and no one from mainland China. This distinction played a role in technology socialization because Google, Facebook, and the Facebook-owned app WhatsApp are generally not accessible in mainland China, except through a VPN; yet WeChat is commonly used in mainland China.

The HK participants self-organized into 11 teams. In Germany, the instructor organized eight students into four teams of two and an additional seven students who worked individually with HK partner teams. A Hong Kong teaching assistant facilitated using the technology tools; in particular, she modeled for HK participants how she had built a Wix website for another project in a course she had taken with the author.
Curricular Contexts

The HK and DE courses had different curricular requirements. The first-semester sociolinguistics core course in HK had a fixed syllabus and a required textbook, on which the content of the course’s online topic discussions was based. Student learning outcomes of the HK course included the ability to:

- describe essential theoretical concepts in sociolinguistics;
- apply these concepts to the analysis and discussion of language and society;
- research and analyze language issues in educational contexts from a sociolinguistic perspective; and
- evaluate language issues in educational contexts and create solutions.

In contrast, the ELT and New Media elective in Germany did not have a set curriculum, and students in Germany, unlike their HK colleagues, could choose to be graded in their course. The applied teacher education program in Germany focused on two areas of TEFL teacher training: (a) intercultural learning (a central goal of language teaching in Germany) and (b) digital-pedagogical competencies (i.e., learning how to work with different tools and thinking about their potential for future work in schools). The telecollaboration was set up as a teaching model to guide participants through the experience and then reflect intensively about it in class through the MG activity (CIT) and, in the case of Germany, in a final portfolio (see, for example, O’Dowd, 2015 for e-portfolio tool use in telecollaboration); the portfolio rubric included a language competence threshold of 4.0 (sufficient) that students needed to pass.

The three telecollaborative tasks were based on O’Dowd and Ware (2009; see Appendix A) and closely related to the HK student learning outcomes. Between October and December 2016, the 11 HK–DE teams were asked to use a private Facebook group for team exchanges on educational issues (Task 1), a Google Doc for a joint literature review to compare different contexts (Task 2), and a wiki for publishing solutions and recommendations on a joint team website (Task 3); using additional tools for negotiating the tasks and work procedures was their own choice. Teams were encouraged to submit any outside social media interactions. Figure 1 provides the timeline for the telecollaboration.

![Figure 1. Timeline, Fall Semester 2016](image)

The HK course started on September 1, and during Weeks 1–7, HK participants engaged with course materials in a flipped classroom mode; their online discussion posts fed back into the face-to-face sessions. In Week 8, German participants joined the virtual exchanges on a private Facebook site. On October 27, both courses conducted an in-class videoconferencing session during the last half hour of the HK evening session, which a few of the afternoon students attended. Outside of class, synchronous communication was encouraged (but not required due to the time difference) because it can contribute positively to relationship building by connecting students on a deeper, personal level more easily (Lord & Lomicka, 2008). Participants in the HK evening section could connect synchronously via chat because their seminar coincided with the German seminar for half an hour.
Data Collection and Analysis

Data collected included social media posts (Facebook, Google Docs, Wix, and social media interactions), the MG reflections, team website reflections, a pre-survey, and a post-survey. Both surveys were administered via Qualtrics. To provide an emic perspective, the pre-survey collected written self-reported data about participants’ prior teaching and technology experiences, their technology proficiency, and their project goals and expectations. The MG reflections on the CIT aimed at gaining insight into how participants perceived the telecollaboration, and the post-survey elicited information about participants’ experiences with the tools used and their project perceptions.

For the pre-survey, 55 HK students and 15 DE students responded; for the post-survey, 42 HK students and 15 DE students responded. MG results were triangulated with team website reflections and post-surveys. Five of the 15 DE members commented on technology use and communication in their MG reflections; CIs were further triangulated with individual post-survey responses. Because the DE semester ended weeks after the HK semester, it was not possible to obtain additional data or information from the DE students other than what their instructor could provide in terms of student portfolios.

The Likert Scale items in the Qualtrics pre- and post-surveys generated descriptive quantitative data, and the open-ended questions were coded and analyzed by two trained coders using MAXQDA software. The first coding round involved open coding based on subjects’ in vivo codes (Glaser & Strauss, 1967) in response to the questions about technology experience, teaching experience, goals, and expectations; this approach was used to maintain a receptive perspective instead of fitting the data into pre-existing categories from the literature. Examples of in vivo codes from subjects’ responses to open-ended questions in the post-survey can be seen in Appendix C. In a second round of coding, in vivo codes were subsumed under different categories. All data are as written or verbatim and all names are pseudonyms.

Results

This section presents results regarding participants’ prior experiences, proficiency, and project expectations, tool-related CIs, and how CIs affected their telecollaboration and perception of tool use.

Participants’ Prior Experiences, Proficiency, and Project Expectations

For the first research question, participants answered pre-survey questions about their prior teaching and technology experience, proficiency in technology use, and project expectations (n = 70; 55 HK, 15 DE; however, not all participants responded to all the questions). The majority reported prior teaching experience (56) and having used technology in teaching (44). Participants also self-rated their prior technology proficiency on a 4-point Likert Scale (Table 2). This information was crucial to gauge their comfort level with tools to be used in the project (e.g., social media and web design tools).

<table>
<thead>
<tr>
<th>Tool</th>
<th>Hong Kong</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Networking Sites (SNS)</td>
<td>2.91</td>
<td>3.13</td>
</tr>
<tr>
<td>WhatsApp</td>
<td>2.58</td>
<td>3.60</td>
</tr>
<tr>
<td>Wikis</td>
<td>2.56</td>
<td>2.73</td>
</tr>
<tr>
<td>Online Document Management</td>
<td>2.44</td>
<td>2.73</td>
</tr>
<tr>
<td>Keypal Exchanges</td>
<td>1.69</td>
<td>1.67</td>
</tr>
</tbody>
</table>

Note: 4 = very good, 3 = good, 2 = satisfactory, 1 = insufficient

Table 2 shows that both groups expressed comfort in using SNS (HK: 2.91, DE: 3.13). The biggest difference between the groups was in their comfort using WhatsApp, which differed by one point (HK:
2.58, DE: 3.60). The other tools used in the exchange were ranked as follows: Wikis (HK: 2.56, DE: 2.73); Online Document Management, such as Google Docs (HK: 2.44, DE: 2.73); and Keypal Exchanges (HK: 1.69, DE: 1.67). Participants were also asked what they perceived as pros and cons of social media (Appendix D), and 27 mentioned the “nature of the tools” as a disadvantage of social media; they also cited “interpersonal issues” (9) and “misunderstandings” (7) as disadvantages.

Finally, in terms of project expectations, participants mentioned the following themes: culture 31 (HK: 20, DE: 11); telecollaboration outcome 28 (HK: 18, DE: 10); education system 18 (HK: 10 DE: 8). While no participant mentioned learning to use different social media or technology tools for language teaching, which was one of the main foci of the DE class, the impact of tool use became significant throughout the project task phases.

**Tool-Related Critical Incidents**

With regard to the second research question, all teams succeeded in producing joint products, and the majority of teams explicitly commented on how the technology tools shaped interacting with overseas partners, as described below. In the face-to-face MG reflection discussion, HK teams expressed verbally how well they thought their telecollaborative teams worked: very well (Teams 3, 4), well (Teams 7, 9), satisfactorily (Teams 1, 10), sufficiently (Teams 2, 5, 6, 8, 11).

**Cls in Teams that Worked Very Well (Team 3 and Team 4)**

According to their MG, HK3 settled on using Facebook written chat, though they had had trouble getting audio or video to work. While HK3 gave Facebook a thumbs-up and wrote that they used it “all the time” next to it, video communication proved difficult because their DE3 partner, Dagna, did not seem to have a microphone or a camera (as expressed by her comment “Can you hear me???”). Yet they negotiated tasks regularly through Facebook Messenger, as seen by Dagna’s post-survey comment, “Facebook chat turned out to be stable and reliable.”

HK4 (Appendix E) drew the Skype logo and wrote “2:00AM” under the face with braids in the inset photo (CI), in which the team’s faces were portrayed smiling; this suggests that they regarded Skype positively. Their DE4 partner Jens-Per confirmed: “We used Skype for live audio phone calls where every member was able to join the call from an individual place.” In this team, the convenience of using Skype appeared to have facilitated interaction.

**Cls in Teams that Worked Well (Team 7 and Team 9)**

HK7 (Appendix F) focused on three tools in their mind map drawing (big picture), Facebook, Skype, and WeChat. Their feedback noted how going from Facebook to WeChat improved their communication. In the post-survey, HK7 member Ethan noted: “WeChat is the most common communication tool used among Chinese and we felt it is functionally the most convenient tool among all those.” Noberta’s (DE7) MG drawing showed that she and her teammates connected “very well,” and she credited WeChat and her telecollaborative partners’ responsiveness. Like Team HK4, this team also noted how Skype and WeChat both eventually facilitated interaction after members noticed their different levels of familiarity with Facebook.

While HK9 member Nikki believed that WeChat was “more convenient for Chinese students,” her HK9 partner Danielle, who was commuting to Hong Kong for the course from the mainland, explained:

> Because I live in mainland China rather than Hongkong, I have to shuttle back and forth between the two places every day. When I was in mainland China, it was not convenient for me to use Facebook so I will tell the [HK9] members my ideas and ask them to help me express my opinions.

This appeared to be a crucial CI because it became clear that access was an issue for students commuting back to mainland China after class, where they could not access most of the project tools—an unforeseen circumstance because instructors had chosen tools based on their availability in Hong Kong. HK9, however, founds ways to compensate for this issue.
Cls in Teams that Worked Satisfactorily (Team 1 and Team 10)
HK1’s CI drawing showed a fire and the words “on fire” in the middle of a computer screen. When asked about the meaning, this team responded that they felt they had heated discussions back and forth. In her post-survey responses, HK1 member Mary explained her team’s challenges:

Actually our local team thought that wechat would be more helpful to our communication and we did suggest our German partners to download this app, but seemed to ignore our invitation download link . . . At last, one of our German partners built a group chat in Messenger. May be the German side prefer to use [Facebook] Messenger while the HK side prefer wechat . . .

In the MG reflection activity, however, their DE1 partner Lotte’s picture showed the Facebook icon and a thumbs up, a question mark for leisure-time activity (“Relax”), and a thumbs down and question mark for work activity (“using Facebook as a work tool & not only as leisure time activity” and “getting to know each other without face-to-face interaction”), implying that while Lotte felt positively about using Facebook in leisure pursuits, she seemed unsure about using it for pedagogical purposes. Mary’s assumption that DE1 partners might prefer Facebook in this project thus seems to contradict Lotte’s reflection. Another challenge was the time constraint, as Mary expressed in the post-survey: “Since everyone is occupied by the assignments we actually do not have much opportunities to communicate.”

For HK10 (Appendix G), WeChat presented a CI (“She is unwilling to download WeChat”), indicated by the HK10 members’ crying faces around the WeChat icon, as is also evidenced in this team’s Facebook messages. Initially, HK10 member Mui had asked DE10 member Vanda if she could download WeChat or iMessage so they could “chat anytime.” Vanda did not reply directly to the question but suggested using Skype or Facebook for video conferencing. There were two more requests by HK10 members Mui and Eunice asking Vanda to download WeChat, but because Vanda did not state why she was not using WeChat, her HK10 partners were left speculating. For example, Miranda (HK10) believed that not using WeChat hindered Vanda in achieving full participation in the HK10 discussions: “she could not always participate in our discussion since she does not use WeChat, the most common communication way we are using.” While HK members interpreted Vanessa’s lack of response to their download request of WeChat negatively, they conceded that their team, in contrast, was not very familiar with Facebook. The MG reflection and the post-survey responses brought this conflict to the foreground, in addition to struggles with the time difference.

Cls in Teams that Worked Sufficiently (All Other Teams)
In HK2’s drawing (Appendix H), their critical incident was depicted in a series of pictures. The first picture depicts a chat message box with “Guten Abend”; the second, a cute cartoon with “haha vs LOL”; the third, the three team members; and the fourth, social media icons for Facebook and WeChat with the letters “K.O.”—although what K.O. means in this context is not clear. Carla (HK2) rated the tools as “convenient and familiar,” but thought the main challenge was that “Germany friends do not know wechat, and we need to teach them how to use.” This could be interpreted as an example of HK2 members outnumbering their DE2 partners in the choice of tools. According to HK2 member Carmen, the use of tools was one of her team’s top challenges: “It seems that they [DE2 partners] are more familiar with those tools, facebook, wix. So, the local team should learn from the global team.” Carmen identified the different cultures-of-use as critical and suggested that each local team should learn from the other telecollaborative team, but she did not specify how. DE2 partner Ada attributed communication issues to WeChat and first-language use by her Chinese partners:

Sometimes I was overwhelmed by the number of messages (one time the Chinese students texted a lot and I woke up and had like 350 messages) [...] Then they told us that they have a group chat in WeChat, which we joined. This improved our communication a lot. Nevertheless, after some time the Chinese students asked if we would mind when they texted in Chinese to discuss something that only concerned themselves. We agreed and then our communication changed for the worse again.
WeChat initially appeared to be the solution to communication issues, but DE2 partners eventually felt overwhelmed from both the message volume and the HK2 team’s use of Chinese in the chat—an instance, perhaps, of the result of unintentionally introducing a new problem while fixing an existing one.

HK5 listed Skype as their CI, in particular with having to use it in the middle of the night to accommodate their partner’s work schedule. DE2 member Cesar felt positive about the tool, saying, “Skype offers the chance to talk”, but less enthusiastic about WeChat (which he described as “alright but not perfect and unstructured”) and Facebook (which he described as “okay but also unstructured”). However, neither side learned the explicit reasons for their partners’ preferences.

While HK6 did not directly state tool use as their CI, their preference for WeChat became obvious. According to HK6 member Thabata, “only communicate with WeChat.” Thabata (HK6) thought WeChat was convenient because of its synchronous nature and the ability to send files and pictures. Yet, DE6 partner Cort raised a different issue: “Wechat was alright it’s the same as whatsapp, but i don’t use my mobile phone very often so for me it was a more challange using and being alawys online instead of how to use it.” Cort’s infrequent app use was thus problematic given that the HK6 side used WeChat for ready “convenience.”

HK8’s main CI was the asymmetry of members (8 HK8 vs. 2 DE8), which hobbled their online negotiations. This is illustrated in HK8’s MG seesaw drawing, which shows the eight HK8 members outweighing the two German members. HK8 stressed that it was virtually impossible for the eight of them to meet locally with the comment, “cooperation :((, let alone for all 10 of them to meet. HK8 member Tina credited WeChat for their communication, saying, “we have wechat which is very helpful”. German partners Adelbert and Max in their MG reflections expressed concerns about Facebook, which was apparently the German members’ main tool of communication, saying it was “a bit confusing because it wasn´t really structured,” and it was “one of the worst tools when working collaborative”). Their comments echo some of the initial reservations expressed by German students in the pre-survey about cons of social media. In addition to struggling with using social media effectively, the time difference was also problematic for this team, according to Tina, HK8.

In their MG reflection, HK11 drew a light bulb over a computer, which indicates that the tool might have facilitated some of the negotiation. DE11 member Erika’s MG drawing has at its center a globe, and her and her teammates on the other side of the globe connected via chat icons. She drew a heart and a smiley face next to the chat icon, which indicates that she perceived the communication positively. Yet, this HK11 team, which consisted of students in Hong Kong and none from the mainland and used WhatsApp, wrote: “group meeting 😖.” Further explanation by both teams would have been helpful to determine if and how their consistency in cultures-of-use regarding WhatsApp facilitated their interactions.

**Participants’ Perception of Tool Use for Telecollaboration**

The following answers were derived from the post-survey and are presented for triangulation purposes. According to social media data and post-survey responses (n = 57: 42 HK, 15 DE), most teams used Facebook Messenger for their global communications; others used Skype, WeChat, and WhatsApp as well.
WeChat and Facebook both turned out to be key communication tools in the exchanges (Figure 2 and Figure 3).

**Figure 2.** Perceptions of WeChat from the post-survey.

As shown in Figure 2, HK participants considered WeChat positively (13), in contrast to DE members (2). Three DE members also provided a more mixed perspective as well. These results underline the divide between mainland participants and their telecollaborative partners with regard to the WeChat app.

**Figure 3.** Perceptions of Facebook from the post-survey.

As Figure 3 shows, most participants (12) commented on both the pros and cons of Facebook. These mixed results are in line with different team experiences with Facebook. For instance, as mentioned in the team discussions above, Facebook worked well for Team 3, but not very well for Teams 7, 8, and 10; for Teams 5 and 9, it was mediocre. Teams 1 and 2 showed a clear division among HK and DE students, with DE1 and DE2 expressing a clear preference for Facebook in contrast to HK1 and HK2.

When asked to reflect on their overall process and experience with the technology tools and post those reflections on their websites, participants on both sides listed more advantages of tools, such as “Very helpful in learning and work, prompt group communication, facilitate document & video editing, website design effective and efficient,” than disadvantages. In particular, tools such as Google Docs (Task 2) and Wix (Task 3) were viewed positively on teams’ website reflections.

Regarding their perceptions on HK project outcomes, the majority of HK post-survey respondents were either Satisfied (26) or Very Satisfied (13); one student reported being Dissatisfied and zero reported being
Very Dissatisfied. Likewise, in terms of their HK–DE project outcome, the majority of HK students were either Satisfied (29) or Very Satisfied (10); one student reported being Dissatisfied and zero reported being Very Dissatisfied. These results indicate that satisfaction with the final team websites outweighed some of the process frustrations that teams experienced.

Limitations

In terms of team interaction data collected and analyzed, the author only had access to social media data that HK teams chose to submit along with their work. She later received the DE students’ portfolios from the German instructor. To manage the data volume, the author sought to make informed decisions when selecting representative examples. Though the self-reported data was needed to obtain an emic perspective, participants’ self-rated skills may not be an accurate representation of their actual abilities. While all teams were able to organize and design final team websites (as was the case in Nicolaou & Sevilla-Pavón, 2016), challenges related to different cultures-of-use remained underexplored. A more complete depiction could be obtained through a modified pre-survey instrument, but this would entail expanding questions about the current set of proficiencies and considering tool socialization (in particular for WeChat, as this tool was not included in the pre-survey). Doing this could potentially lead to an in-depth discussion of the functionality of each of the tools and its affordances and constraints regarding pedagogical purpose and application.

Moreover, the study design would benefit from additional tools that allow for participant reflection. For instance, when students comment on tool use in post-surveys or when they draw their CIT on the poster, few of them provided reasons. It would also be useful to elicit their understanding of concepts such as culture or telecollaboration, as they were mentioned in the pre-survey.

Finally, in her role as participant observer, the author’s perspective was influenced by being in only her third semester in the HK institutional contexts, a cultural and linguistic environment that was different in some aspects from her prior experiences in Western contexts.

Discussion and Conclusions

Social Media Familiarity and Access

Overall, teams in both locations had expressed comfort in using social networking at the outset, and the majority of students (54) perceived availability or convenience to be the main advantages of social media. On the other hand, half of respondents (27) thought that the nature of the tools was a disadvantage, as were interpersonal issues (9) and misunderstandings (7). While the project focused on exploring technology tools for teaching and on learning about different educational contexts, participants expressed the following initial project expectations: “culture” (31), “telecollaboration outcome” (28), and “education system” (18). While participants did not explicitly express interest in the use of different social media or technology tools for language teaching, the impact of different cultures-of-use became significant throughout the project task phases.

Though the author and her German colleague had initially been aware of the mainland restrictions regarding Facebook and the Google tools, nonetheless, they decided to use Facebook because the author had used it in a HK–USA telecollaboration with BA students who were all local to Hong Kong (Fuchs, 2017). Because Google Docs allows downloading documents in different formats, it was stipulated that mainland students could take their work with them. Participants, particularly those from mainland China, who had had no prior exposure to some of the tools, were committed to learning new tools (e.g., Google Docs, Wix) in order to complete the joint projects. This attitude supports the finding that the project was successful in modeling how to use these tools.

Cultures-of-Use Perceptions and Socio-Institutional Parameters

Differences in cultures-of-use became evident in the MG reflections, with some reference to students’ initial
concerns expressed in the pre-survey (e.g., time-consuming, distractions, interpersonal issues, and misunderstandings). Nine of the HK teams (all except Team 6 and Team 11) identified technology tool use as CIs for their telecollaborative teams in one form or another, although all tools were rated positively on teams’ website reflections.

The majority of HK participants (49) were mainland students who preferred the Chinese chat app WeChat. HK11, in contrast, was the one team with local HK students only, who used WhatsApp with their DE partner. With regard to perception of tool use during the exchange, there was a stark contrast in terms of Facebook and WeChat. This does not seem surprising given the cultures-of-use and lack of access to some of the tools by mainland students.

A number of socio-institutional constraints affected the exchange. For example, access to Facebook, Google, and WhatsApp was limited for those HK students who were commuting to and from the mainland to attend the course. Another limitation was the high number of participants from Hong Kong (58 students), which created an imbalance that is atypical in most telecollaborations (O’Dowd & Lewis, 2016). The asymmetry with the number of DE participants negatively affected the telecollaboration, as expressed by DE members who felt overwhelmed by the volume of messages from HK members or the use of the Chinese language. Additionally, the large number of students posed a challenge for monitoring individual chats, especially when they were in Chinese.

The tight timeline in HK resulted in a lack of more in-depth reflections and discussions in class. Moreover, because the HK course was a required course, unlike the German course, which was an elective, the amount of content to be covered in the core course limited the time available for the exchange. HK students were graded for each task, which left the HK instructor with little leeway to align task parameters more closely with her DE colleague to ensure more collaborative contributions and equitable participation.

The two DE8 students who chose to receive a grade compiled a portfolio about the exchange because the reflection about the experience was central to their competence development. Their joint team was the largest, and members on both sides attributed any lack of participation to differences in assessment and intra-group competition. Finally, while a project with just one of the HK sections might have been favorable for matching participant numbers more closely, this was not an option due to the practice of aligning HK courses in terms of contents, assignments, and assessments.

Conclusions

Overall, in terms of communication processes, members from a number of teams stressed the benefits of synchronous communication, although there were logistical and technical challenges. As Hauck and Youngs (2008) have stated, “[the] success of this type of learning clearly depends on all participants’ awareness of the potential uses and abuses of the special affordances available to everyone” (p. 97). HK8 members struggled with aligning tools and communication within their local and their telecollaborative team, which echoes Turula and Raith’s findings (2015) regarding disappointment with communication problems and a low level of engagement or lack of motivation in the partner group. While a chat can have a positive impact on community building in telecollaboration (Lord & Lomicka, 2008), unawareness of their partners’ tool socialization—especially with synchronous tools, as evidenced in Team 10—may have prevented participants on both sides from engaging more critically with the tools’ purpose, function, and accessibility in teaching and learning as relevant for participants’ teaching contexts. As Thorne (2003) has pointed out, a basic agreement acknowledgement regarding different cultures-of-use is needed: “[...] differing cultures-of-use of an ostensibly ‘shared’ or ‘common’ mediational artifact may invoke divergent communicative expectations. For internet-mediated interpersonal or hyperpersonal relationships to develop, I suggest that certain minimum alignments of cultures-of-use are a necessary condition” (p. 57). To this end, existing telecollaborative task criteria (see Kurek & Müller-Hartmann, 2017) should be expanded to encourage participants’ problematizing of tool socialization and CIs related to different tool uses while taking into account the larger socio-institutional contexts.

Finally, regarding their perceptions on both the HK and HK–DE project outcomes, the majority of HK
students (39) expressed a relatively high level of satisfaction despite numerous difficulties in the collaboration process. While this is a desirable outcome of any project work, it seems that the work processes and students’ reflections thereof (i.e., how the satisfaction was achieved) should be equally important. The author thus argues for a systematic integration of CIT into each one of the task phases, which requires a shift from task content to problematizing CIs relating to different contexts and tool socialization, especially in cases where participants may foresee limited tool access in their future teaching contexts, or where different assessment practices may result in increased one-sided tension (O’Dowd, 2015). Problematizing CIs should also aim at re-establishing participants’ emotional equilibrium through a safe and supportive environment for exploration. Though this study was not set up to focus on participants’ empathy, the author urges further investigation into this area to help expand and shape the concept of global citizenry, which needs to be created from the capability of interconnecting and empathizing (Thorne, 2016a) and cannot be reduced to the functionality of the tools. Telecollaboration within the framework of cultural awareness and CIT analysis is a powerful tool in achieving this goal.

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Notes

1. This study is part of a larger study, which was funded by a 2016 start-up grant by the City University of Hong Kong. An earlier version was presented at the Sixth International Conference on the Development and Assessment of Intercultural Competence; Intercultural Competence and Mobility: Virtual and Physical, January 25–28, 2018, Tucson, Arizona (see also Fuchs, 2018; Fuchs, Lo, & Thapa, in press).
3. Similar to French, German distinguishes between the formal “Sie” (vous) and the informal “du” (tu) in the form of address.
5. For immediate reference, Hong Kong is abbreviated HK and Germany is abbreviated DE (based on participants’ institutions’ geographic locations).
6. “HK students” and “HK participants” refer to both mainland and Hong Kong Chinese unless indicated otherwise.
7. The decision to form 11 telecollaborative HK-DE teams—instead of 15—was made jointly by the instructors so as to avoid having all 15 German students work solo. The rationale for having pairs in Germany was that students could rely on each other for backup in case one of them could not post. While 15 teams might have reduced the HK numbers in each team to 3–4 participants, it might have been overwhelming for the German students.


Phelan, L. (2012). Interrogating students’ perceptions of their online learning experiences with Brookfield’s critical incident questionnaire. *Distance Education, 33*(1), 31–44. doi:10.1080/01587919.2012.667958


**Appendix A. Project Tasks**

**Task 1 Information Exchanges: HK students only (Canvas/Facebook)**

Our HK course will start the online discussion on Canvas (in our respective course section) in flipped mode, which means that you will need to read the relevant chapters for the week and then engage online by posting one reply to the readings and one reply to another student’s comment *prior to class.* Once [the DE
institution] colleagues join, we will move to a private Facebook Group. Both the quality and quantity of posts will be assessed, as well as on how thoroughly you complete required readings in our course book and selected articles and how well you are prepared to discuss them online.

**Individual Introductory Bio (Due 9/15, HK institution only)**

The Individual Intro Bio serves the purpose of getting to know each other better so that you can select someone with similar interests to form a HK team.

Please post a brief individual introduction on about.me or LinkedIn to the class by including these points: Please write about your cultural and linguistic background, educational background and professional experience, institutional context of your university, your professional situation or goals, and personal interests and anything else you’d like to share. Feel free to upload photos! Please link to our Facebook Group in the form of a short intro statement plus the name-letter-associations. Post a short reply to two to three classmates’ Intro Bios post, commenting on something you noted about them.

**Team Video Intro Clip: HK Teams; DE Teams (Due: 10/06 at the HK Institution; 10/23 at the DE Institution)**

Please create a HK Team Intro Clip (or a DE Team Intro Clip for German participants) by recording your team (3-5 minutes maximum). The clip (also to be posted to our Facebook Group) should include: Expansion of your individual intro; partner introductions, expectations from the collaboration, interest in technology and language teaching (or literature), and preliminary ideas for your project for Tasks 2 and 3.

You can use Voicethread, Vimeo, or Vialogues for your video. Please review the other teams’ and your telecollaborative partner’s clips using the Comment function in the respective tool. File format (to be uploaded to our platform): Audio/video file (e.g., mp3) or hyperlink.

**Task 2 Joint Literature Review: HK–DE (Google Docs)**

Before collaboratively writing the Literature Review after comparing and contrasting the respective contexts under investigation, telecollaborative teams negotiate a Team Name and Philosophy. Some teams chose to talk on their private group page on Facebook, while others chose to talk privately via Skype, WhatsApp, WeChat, or Facebook Messenger.

**Team Philosophy: HK–DE (Facebook)**

1. Work together via Facebook to agree on a name that best shows the spirit of your telecollaborative group.
2. Write a short text on Facebook that explains your group’s philosophy.

**Identifying Research Issue, Conducting Literature Review: HK–DE (Due: 11/10 for all telecollaborative teams)**

You will work in your HK-DE teams to complete this task by:

1. Researching a key concept of your choice related to language, education, and society. Based on your exchange so far—that is, your knowledge about your local context and interest in your partner’s context—what kind of issue are you especially interested in? This needs to be an issue or question that pertains to both contexts in some way.
2. Comparing and contrasting findings as you relate to different educational or institutional contexts via online exchanges. First, conduct research on your question or hypothesis by comparing the different contexts of your choice (e.g., Hong Kong, China, Germany). Next, come up with a list of points that characterize the different contexts in terms of similarities and differences.
3. Synthesizing your research and discussion results on a shared Google Doc with individual contributions.
Task 3 Application Project: HK–DE (Wix Websites)

You will collaboratively (in conjunction with both your HK and telecollaborative partners) synthesize, evaluate, and translate the evidence into solutions and recommendations for practice and publish them on a joint project website. For this task, please use a wiki platform (e.g., Wix, or a tool of your choice). Should you have any technological trouble or need other help, please contact [the TA].

You will (a) compile your main findings in response to a number of guiding questions (see below) on a joint project platform (wiki), and (b) find solutions and make recommendations for practice in the contexts you chose in Task 2.

You will be assessed based on how thoroughly and completely you synthesize, evaluate, and translate the evidence into solutions and recommendations and publish them on a website (wiki). This requires collaborating as a team in using your research in Task 2. You will be assessed on how thoroughly you have compiled your main findings (wiki), how well you have integrated multimodality, and how well founded your solutions and recommendations for practice are.

Guiding Questions

The main learning goal for Task 3 is for you to apply your literature review (research) to your own situation by identifying possible problems for you (and your future job). For instance, if you looked at gender representation in textbooks in HK, China, or Germany, what issues can you identify (based on your findings from Task 2.2) that may pose problems for you as a teacher? Why? What recommendations/solutions does your telecollaborative team suggest? Provide a rationale for all suggestions/recommendations. We also want you to reflect on your work process/progress in the different tasks, which is why we have also included team reflection questions (see below).

Another learning goal of Task 3 is for you to become familiar with collaborating on different platforms. You used the collaborative writing tool Google Docs for Task 2.2, and now, in Task 3, you will compile everything on a joint website/platform for multimodal presentation.

Please incorporate the following into your Task 3 (these are the actual questions):

1. How can you effectively incorporate aspects from your Task 2.2 lit review (as background information) on the platform? What outside sources can you link to videos, websites, blogs, and other social media tools?
2. What factual information have you discovered from your two contexts?
3. Can you put your findings into some form of visual representation, such as tables, graphs, or other data representation?
4. Which are the deeper issues that you can detect when analyzing your research results?
5. What kind of solutions or recommendations can you envision for these issues?
6. What was your team’s experience regarding working with the different tools in Tasks 1-3? Which ones can you imagine using in your own language teaching? Why and for what purpose(s)?
7. What was your overall team learning experience? Provide a brief reflection on your intercultural, educational, and professional learning.

Appendix B. Magnifying Glass (MG) Reflection Guidelines

A. In-class reflection on telecollaborative experiences

Get together with someone from another team. (I will count you off.) Write brief answers to the following questions:

1. What did you find out about your telecollaboration partners’ culture(s) when doing Task 2?
2. In the negotiation process of the paper’s content, what did you learn/find out about your partners...
in terms of working in a team?

Be prepared to present your findings via the doc cam (and hand in your bullets).

**B. Inductive systematic analysis (problematization)**

1. Get into small teams. Take a paper magnifying glass (MG).
2. On a piece of paper, brainstorm your thoughts, ideas, and emotions about the telecollaboration exchange—anything that comes to your mind. 10 minutes.
3. Organize this in the form of a mind map (on the front).
4. Use the MG and choose one critical incident (it can be positive or negative) and put it under the MG to provide a visual representation of the critical incident (on back).
5. Draw it into the MG.

**C. Improvement of practice (solution cycle)**

1. When you are done, turn the sheet around.
2. I will collect all the sheets and mix them up.
3. We will then look at them as a whole class and start interpreting and comparing the drawings. You can refer to 2-3 drawings at the same time to make comparisons and show similarities and differences.

**Appendix C. In Vivo Codes (MAXQDA)**
Appendix D. Team Perceptions of Social Media

<table>
<thead>
<tr>
<th>Social Media Pros (No. of Ss)</th>
<th>Social Media Cons (No. of Ss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability/convenience (54)</td>
<td>Nature of the tools (27)</td>
</tr>
<tr>
<td>Rich content (16)</td>
<td>Time-consuming (15)</td>
</tr>
<tr>
<td>Multimodality (11)</td>
<td>Potential addiction (13)</td>
</tr>
<tr>
<td>Simplicity (10)</td>
<td>Distraction (13)</td>
</tr>
<tr>
<td>Interpersonal relationships (3)</td>
<td>Interpersonal issues (9)</td>
</tr>
<tr>
<td>Expressing meaning (“lively,” “emojis”) (2)</td>
<td>Misunderstandings (7)</td>
</tr>
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<td></td>
<td>Privacy (7)</td>
</tr>
</tbody>
</table>

Note: HK students commented that tools were “virtual and unreal” and “without physical context,” while DE students described them as “unstructured” and “confusing.”

Appendix E. HK4 Mind Map (big picture) and CI (Inset)
Appendix F. HK7 Mind Map (big picture) and CI (Inset)
Appendix G. HK10 Mind Map (big picture) and CI (Inset)
Appendix H. HK2 Mind Map (big picture) and CI (Inset)

About the Author

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