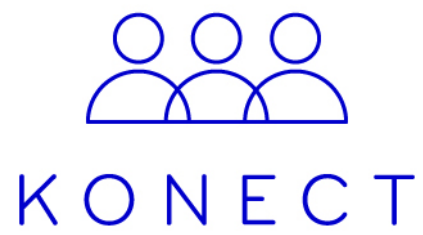# Case studies

for 21st century secondary education

Melinda Dooly & Vincenza Tudini

KONECT

Case studies for the 21st century secondary education
Materials, references and videos

Melinda Dooly and Vincenza Tudini

Acknowledgements:

Contents

Introduction to the case studies
Melinda Dooly

The primary purpose in producing this collection of case studies for 21st century primary education teacher education is to provide materials for other colleagues to use in order to promote discussion, reflection and in-depth understanding of key issues facing teachers in 'the information age' of today. Stemming from data and materials produced by the research teams of KONECT, the authors of these case studies take the position that teachers will have a key role in preparing future citizens to be 'e-functional'. Being 'e-functional' entails many areas of competences, apart from digital and linguistic skills, not least of which are the ability to employ multiple literacies in order to work and communicate in multilingual and multimodal contexts. Even as students become increasingly more adept at the use of technology, schools must help them couple these digital capacities with the type of knowledge construction that they will need in an interconnected world in order to 'e-function' effectively, including (but not limited to) critical and reflexive thinking, creativity and problem-solving skills, multilingual and multicultural communicative competences as well as interpersonal awareness that can lead to empathy and better understanding of others who are both similar and different from one's self.

The materials included here aim to elicit thought and discussion for both pre and in-service teachers. The main premise of the activities is that educators' conversations can provide the basis for knowledge transformation, in particular through stimulating meaningful dialogue. We would argue that constructing knowledge, through in-depth discussion with other teachers regarding real contexts and events, can help raise personal awareness and foster better understanding of our own lives as professional educators. Scholars have long stressed the role of extended, cohesive dialogue for more participative and productive engagement in the learning process (cf. Barnes, 2010; Mercer, 2007), in particular through student-teacher discussion (cf. Berliner, 2001; Larrivee, 2000; Deng & Yuen, 2013; Love & Simpson, 2005).

Penlington (2008) puts emphasis on "the process of practical reasoning" (p. 1305) as a "tool for analysis" (Penlington, 2008, p. 1306) for teacher development because it places more prominence on "decision-making processes and internal resources that underpin and shape teacher practice" (Ibid., p. 1306). This is where discussion of selected cases can play a role. Case studies have long been used in professional formation – in particular in business schools and law but they are equally applicable to any discipline (such as teacher education) in order to foster student exploration of how theoretical concepts learnt in class might be applied to real world situations.

The materials have been designed with a 'typical', face-to-face teacher education course in mind. That is, the materials provide input and discussion questions and activities that provide a framework for analysis which can be done individually or in groups. However, it is recognized that these materials will inevitably be adapted to meet singular contexts of each teacher educator or that they may even serve as a tool for self-study. In the spirit of open

education resources (OER), we encourage users to adopt and adapt the ideas put forth here in order to best fit their own needs. The only limitations are the use of the videos due to privacy issues[1].

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Deng, L., & Yuen. A. (2013). Blogs in pre-service teacher education: Exploring the participation issue. *Technology, Pedagogy and Education 22*(3), 339–356.

Larrivee, B. (2000). Transforming teaching practice: Becoming the critically reflective teacher. *Reflective Practice 1*(3), 293–307. https://doi.org/10.1080/713693162

Love, K., & Simpson, A. (2005). Online discussion in schools: Towards a pedagogical framework. *International Journal of Educational Research 43*(7–8), 446–463. https://doi.org/10.1016/j.ijer.2006.07.009

Mercer, N. (2007). Sociocultural discourse analysis: Analysing classroom talk as a social mode of thinking. *Journal of Applied Linguistics, 1*(2),137–168. https://doi.org/10.1558/japl.v1i2.137

Penlington, C. (2008). Dialogue as a catalyst for teacher change: A conceptual analysis. *Teaching and Teacher Education, 24*(5), 1304–1316. https://doi.org/10.1016/j.tate.2007.06.004

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[1] To request access to the videos that accompany these case studies, please go to the

Case study 1: 'I see a ….'

Authors: Melinda Dooly and Vincenza Tudini

Topics of interest in this case study: telecollaboration, task design, social semiotics, group configuration around technology, classroom interaction

Profile of students in video case study: Grade: 8, 12-13 years old in an English as a Foreign Language (EFL) classroom

Prompting questions: What are Google glasses? How can they be used in the classroom? Can you think of any language activities that might involve using Google glasses?

Description of the activity going on in the video: Students have been working on a project – in telecollaboration with another class in a different country- that deals with the plight of refugees in Europe. They have been learning about European policies regarding refugees. In this activity, they are watching a 3D documentary video about refugees' lives and trajectories; depicting their journey from war-torn towns, then being on a boat and finally arriving in Europe. They have been asked to describe and communicate to their classmates what the refugees are experiencing as they watch the video. They are being recorded as they narrate out loud what they're seeing. Ultimately, the recordings will be shared with their telecollaborative partners (who have not seen the video) so that the partners can then ask the viewers questions about what they saw in the videos.

Activities

1. Watch the video.

2. Try to answer these questions (individually or in pairs).

- What affordances are evident for learning about the refugee crisis in Google glasses, according to this video?
- How is this activity an improvement on other types of activities on the same topic?
- What is the foreign language being used in this video?
- Which communication skills are being used, in addition to speaking. What type of oral language is being used?
- Is this an example of a typical conversation?
- What kind of interaction is it?
- When might students need this type of competence?
- What types of learning are taking place?

3. Read the assigned text on 21st century competencies[2]. Are any of the competencies mentioned in the text being developed in the video activity? If so, which ones?

4. How do you think the teacher designed this task? Try to write out the steps that the teacher planned and implemented for this activity.

These are the steps the teacher actually took. After reading them compare them to your list of steps. What are the differences between your steps and the teacher's?

The teacher bought 1 pair of Google cardboard glasses and tested them herself. She downloaded the video into her cell phone and tested that. In class she had students sit in a circle and told them that they would watch a video clip individually in front of the class. She did not tell them what they were going to see. She asked for volunteers to come to the front of the room. As they were watching the video they were asked to narrate what they were watching. She recorded the students to share with students in another country (the students were working on a telecollaborative project). Not all the students watched the video, as there was only one video available, which excluded other students from the experience. There was no follow-up activity beyond sharing the recording with Spanish students. Only later in the term did students get asked to write a poem about the feelings regarding war, conflict and refugees.

5. Discuss in groups, how you think you could improve this task to enhance language learning and 21st century competencies. Which competencies would you focus on? What activities would you do?

Suggested final activities:

1) Do you think this topic is appropriate for a telecollaborative project? Discuss in groups how sensitive materials (such as the refugee plight) can used for telecollaboration.

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[2] We have suggested some reading for this case study but have left this assignment open to the teacher.

2) Of the emergent themes in this case study: telecollaboration, task design, social semiotics, group configuration around technology, classroom interaction etc, ask your students to select one of the theme that interests them to carry out more in depth research. They should share their findings and conclusions with their classmates.

Suggested reading:

Dooly, M. (2017). Telecollaboration. In C. Chapelle & S. Sauro (Eds.) *The handbook of technology in second language teaching and learning* (pp. 169-183). Hoboken, NJ: Wiley-Blackwell.

Dooly, M. (ed.) (2008). *Telecollaborative language learning. A guidebook to moderating intercultural collaboration online*. Bern: Peter Lang.

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Ware, P & Kessler, G . (2016). Telecollaboration in the secondary language classroom: Case study of adolescent interaction and pedagogical integration. *Computer Assisted Language Learning, 29* (3), 427-450.

Van, O. K & Voogt, J . (2018). Teachers' conceptualization and enactment of twenty-first century competences: Exploring dimensions for new curricula. *The Curriculum Journal*, *29* (1), 116-133.

***Case study 2: 'Why do students talk when don't want them to and don't talk when we want them to?'***

Topics of interest in this case study: telecollaboration, task design, group configuration around technology, classroom interaction

Profile of students in video case study: Grade: 8, 12-13 years old in an English as a Foreign Language (EFL) classroom

Description of the activity going on in the video: (Not given until after viewing the video). The 2 videos for this case study are of the same session; one is with audio and one without.

Activities

1. Observe the video without audio first and answer the following questions: What do you observe without audio? Pay attention to their behaviour and their body postures. What do you think they were asked to do?
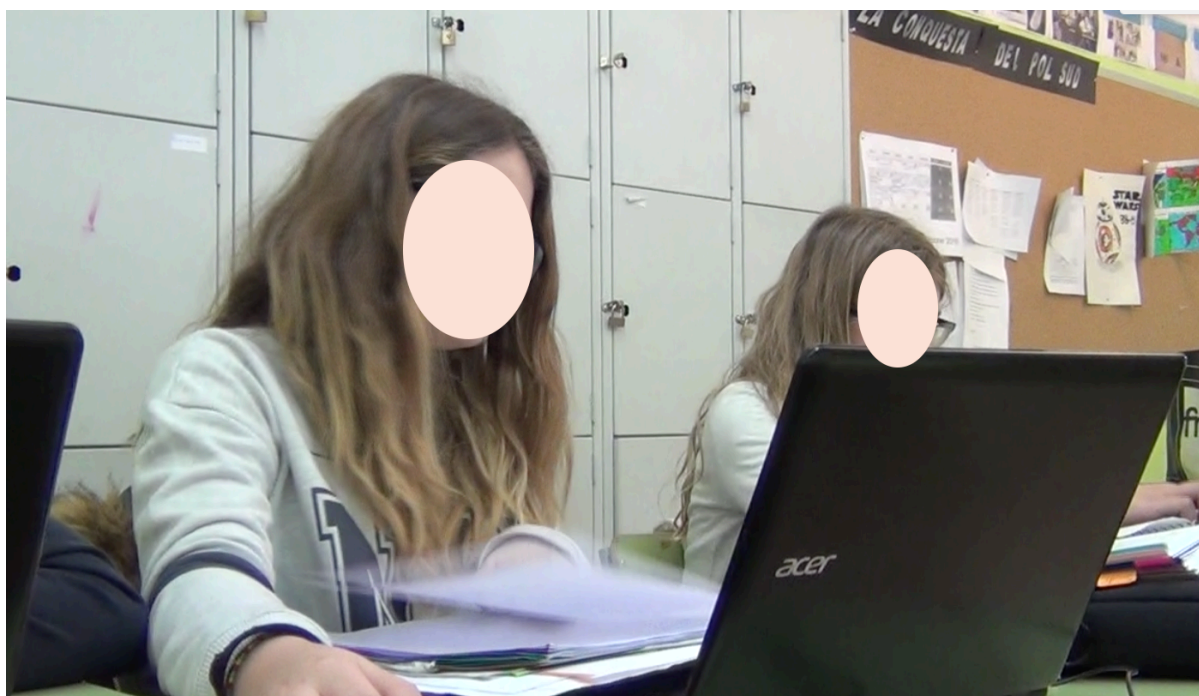
2. The students were asked to watch a video, and then write the main points of what they had understood in a google document to share with their telecollaborative partners. Watch the video again with sound. Why do you think discussion did not occur in some groups?

3. Do you think the configuration of around the computers constituted a problem?

4. Research the type of configuration which is used in language labs around the world. Is there any specific configuration which promotes collaborative discussion? Is that confirmed in these videoclips? Explain your answer.

5. This task conforms to widely accepted principles of telecollaboration in education where students produce materials/products for a target group (as in this task –they are providing a summary about the video they have watched). However it should be recognized that telecollaboration is seen both as a competence, as well as a tool or means to attaining other competencies, such as intercultural communication, negotiation skills, team work, problem-solving etc. Do you feel that this task is the best way to exploit telecollaboration to develop students' lexicon? What about other competencies such as collaborative work? Problem-solving?

6. What are the positive and negative aspects of this task in relation to 21st century competencies?

Suggested final activities:

1. Redesign the activity to be more authentic and conducive to collaborative learning both in class and online.
2. Ask your students to become researchers in social semiotics. Have students do a microanalysis of the body language and gestuality, and different artefacts in video 1 (without sound). Why conclusions can you make about the groups' behaviour based only on social semiotics or interactional analysis?
3. Of the emergent themes in this case study: telecollaboration, task design, social semiotics, group configuration around technology, classroom interaction etc, ask your students to select one of the theme that interests them to carry out more in depth research. They should share their findings and conclusions with their classmates.

Suggested reading:

Byers, T., Hartnell-Young, E., & Imms, W. (2017). Empirical evaluation of different classroom spaces on students' perceptions of the use and effectiveness of 1-to-1 technology. *British Journal of Educational Technology, 49*(1), 153-164.

Dooly, M. (2018). "I do which the question": Students' innovative use of technology resources in the language classroom. *Language Learning & Technology, 22* (1), 184-217.

Haddington, P, Mondada, L & Nevile, M . (2013). *Interaction and mobility language and the body in motion*. De Gruyter: Berlin.

Kohn, K & Hoffstaedter, P . (2017). Learner agency and non-native speaker identity in pedagogical lingua franca conversations: insights from intercultural telecollaboration in foreign language education. *Computer Assisted Language Learning, 30* (5), 351-367.

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Authors: Melinda Dooly and Vincenza Tudini

Topics of interest in this case study: telecollaboration, task design, synchronous vs asynchronous, online classroom interaction, language production and reception, sociopragmatic and intercultural competences online

Profile of students in video case study: Grade: 8, 12-13 years old in an English as a Foreign Language (EFL) classroom

Description of the activity going on in the video: Middle school students in Spain and Sweden were asked to prepare a Skype video recording for students in their telecollaborative partner country. They had these written instructions:

In groups, think of a questions you'd like to ask your colleagues in the partner country in order to get to know them better. Think about the questions carefully (you can write them down to practice them if you want).

Ask us for help if you need it.

Practice what you want to record a few times, then each group will have a chance to record their message in a quiet room.

Activities

1. Read the task description (above) and then watch the two videoclips.

Video 1

Video 2

2. Note different interpretations of the task between class one and class two. Why do you think this difference occurred? Was this due to cultural differences? Individual differences? Institutional/curricular differences?

3. Does telecollaboration need to allow for these differences? (see suggested reading about institutional constraints in telecollaboration). Do you think timetabling constraints are an issue? Were teacher instructions a factor?

4. View movie 3. It is one group of Spanish student's response to Swedish students' questions.

Video 3

5. Is there evidence of learning? What type? (e.g. comprehension, oral production, interpersonal skills, team work, intercultural understanding?) Why? Why not?
6. Watch videos 4 and 5.

Video 4

Video 5

7. What do you see as the advantage of videorecordings (versus synchronous online meetings)? (Consider the learning opportunities of repetition vs spontaneous production).
8. Based on their behaviours, what affordances do you think the students recognize and react to while using the videorecording technology (eg. affordance of visibility)?
9. Do you think this exchange of questions would have been different if it had been synchronous? In answering your question, consider the affordances and constraints of synchronous versus asynchronous communication.

Suggested final activities:

1. Ask your student-teachers to simulate the same activity that they have just read about. They should record questions for another group of students whom they do not know and document how they feel about this task before, during and after the activity. What kind of scaffolding tasks can you design to help students feel more comfortable with this activity?
2. Discuss how teachers can optimize this type of activity in a whole class. Consider these features: what should the other students do while some are recording? How do you scaffold the different levels of oral language ability for the different groups? How much time should you dedicate to this activity? In groups, design pre and post-task scaffolding for this activity. Share it with the rest of your class.
3. Of the emergent themes in this case study: telecollaboration, task design, synchronous vs asynchronous, online classroom interaction, language production and reception, sociopragmatic and intercultural competences online etc, ask your students to select one of the theme that interests them to carry out more in depth research. They should share their findings and conclusions with their classmates.

Suggested reading:

Belz, JA & Müller–Hartmann, A . (2003). Teachers as Intercultural Learners: Negotiating German–American Telecollaboration along the Institutional Fault Line. *Modern Language Journal, 87* (1), 71-89.

Byram, M., & Wagner, M. (2018). Making a difference: Language teaching for intercultural and international dialogue. *Foreign Language Annals, 51*, 140–151.

Dooly, M. (2016). 'Please remove your avatar from my personal space': Competences of the telecollaboratively efficient person. In T. Lewis & R. O'Dowd (Eds.). *Online intercultural exchange: Policy, pedagogy, practice* (pp. 192-208). NY/London: Routledge.

Garrison, D. R. (2011). *E-learning in the 21st century: a framework for research and practice* (2nd ed.). New York:Routledge.

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Case study 4: Affordances and constraints across technologies
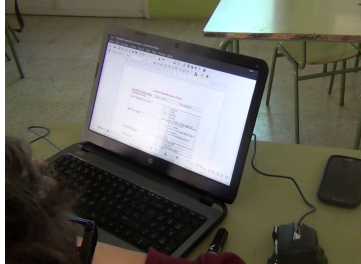
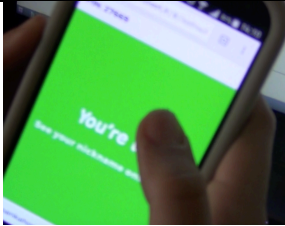Authors: Melinda Dooly and Vincenza Tudini

Topics of interest in this case study: affordances and constraints of technological tools, task design using technology, integrated language and content learning through technology

Profile of students in video case study: Grade: 8, 12-13 years old in an English as a Foreign Language (EFL) classroom

Description of the activity going on in the video: Short video examples of students using different technological tools in the foreign language classroom

Activities

1. Watch the 6 videos that show examples of students using different technological tools in a foreign language classroom (English).

Video 1: shared online document	Video 2: Augmented reality tool	Video 3: voice & video recording tool
Video 4: online opinion poll	Video 5: Online quiz	Video 6. Videoconferencing tool

2. Describe the task that you think has been given to students to accomplish with these tools. Share your answers with the class.
3. Are there examples of interaction 1) between students face-to-face; 2) between students and the technology; 3) between geographically distant students?
4. What type of language use do you observe? Which one do you find the most communicative and why? Which ones are focused on knowledge retention? Which ones are more focused on knowledge demonstration?

5. Compare your answers with the expected outcomes for each activity. Were you surprised? Why or why not? What would you do the same? Differently?

Video 1: shared online document Students were asked to document their own learning from the project session and share it with their small groups (made up of members from their class and the partner class in another country).	**Video 2: Augmented reality tool** Students were asked watch and narrate a documentary film about a refugee journey.	**Video 3: voice & video recording tool** Students were asked to work together in small groups to present themselves to their telecollaborative partners in another country and to ask their partners questions. This group struggled with simple sentences and were very nervous about recording.
Video 4: online opinion poll Students had previously discussed reasons why a person might decide to stay or leave their country (e.g. refugee). They had also discussed what were they most important features of having a 'quality' life. They were supposed to work in groups to rank these life qualities according to importance.	**Video 5: Online quiz** In a previous class, students had been introduced to 'both sides of the argument' concerning EU countries hosting Syrian refugees. In this class students used an online quiz to 'vote' whether the statements shown were 'for' or 'against' arguments for accepting refugees into a country.	**Video 6. Videoconferencing tool** Students were asked to 'get to know their telecollaborative partners'. There was no teacher supervision, only a researcher with a camera in the room with them.

6. Would you use these tools in a similar fashion or differently? Explore some ideas in your group.
7. Do you think the assigned tasks in the videos have exploited the affordances of the technologies for collaborative learning? If yes, how? If not, why not?
8. Consider the time and effort required for a) the teacher learning to use the tool b) the teacher showing the students how to use the tool c) setting up the tool in the classroom d) preparing the new activity. Does the effort required match the learning outcomes in terms of quality? Is there a simpler way to achieve the task objectives?

Suggested final activities

1) Considering the pressure that teachers are under to use technology, do you believe that the videos show evidence of quality learning? How would you improve the task design to a) support language comprehension and use b) support subject knowledge. Can this be done in an integrated way with these tools? Or are there others that you would consider? Discuss your answers and produce a poster, presentation or short video of your conclusions.
2) Of the emergent themes in this case study: affordances and constraints of technological tools, task design using technology, integrated language and content learning through technology etc, ask your students to explore a theme of interest and carry out more in depth research to share with their classmates.
3) Write a language and content integrated task that you think might be enhanced through use of a technological tool. Share with your classmates and critique each other's proposals.

Suggested reading:

Bozdoğan, D. (2015). 13 Technology-enhanced CLIL classrooms. In S. Pokrivčáková, et al. (Eds.). *CLIL in foreign language education: e-textbook for foreign language teachers* (pp. 164-175). Nitra: Constantine the Philosopher University.

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Gonzalez-Lloret, M. (2017). Technology for task-based language teaching. In C. Chapelle & S. Sauro (Eds.) *The handbook of technology in second language teaching and learning* (pp. 234-247). Hoboken, NJ: Wiley-Blackwell.

*Case study 5: The role of the teacher in telecollaborative exchanges*

Authors: Melinda Dooly and Vincenza Tudini

Topics of interest in this case study: 21st century competences, task design of telecollaboration, communicative activities

Profile of students in video case study: Grade: 8, 12-13 years old in an English as a Foreign Language (EFL) classroom

Description of the activity going on in the video: Two small groups of students from different countries are meeting for the first time for a telecollaborative exchange. They will be working together throughout a semester-long project based on the topic of the Syrian refugee crisis. In this first meeting they are only asked to set up the ways they will stay in contact and then they are free to discuss whatever they like.

1. Watch this video clip of the students' synchronous interaction on Skype, first with the teacher in the classroom and then out of the classroom.
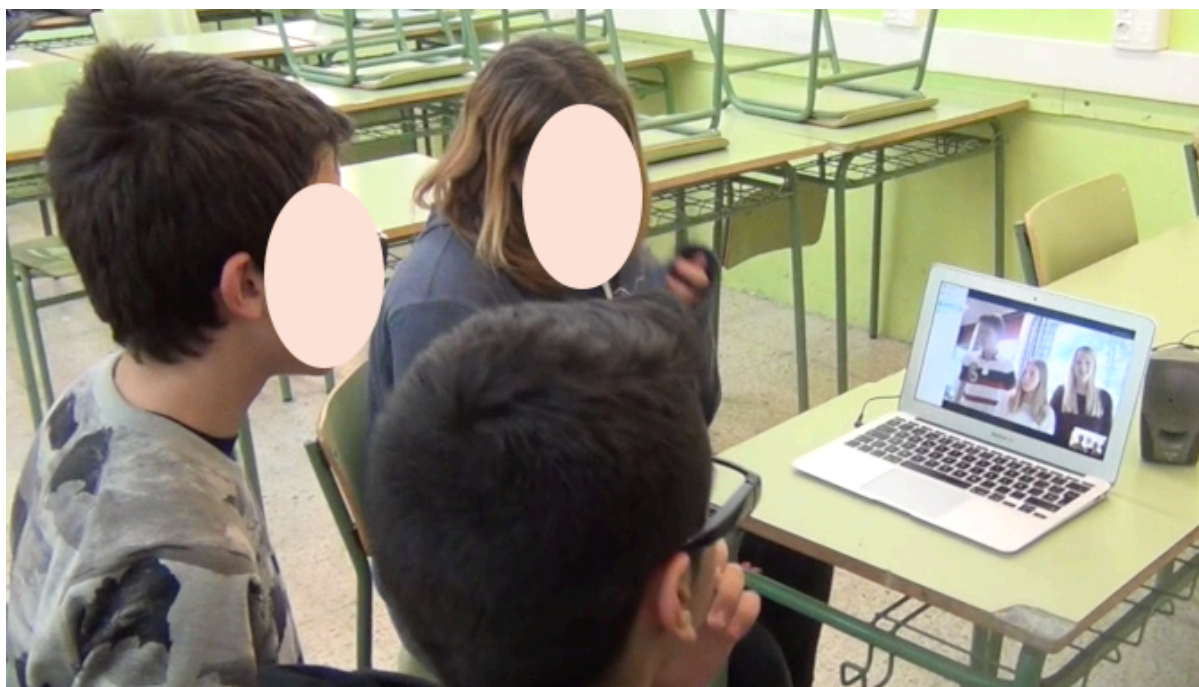
2. View the first part of the video again (when the teachers are in the room), focusing on the amount of talk of each participant.

3. Who does the most talking? Are there any moments of silence? Who decides the conversation topics?

4. Consider Sinclair and Coulthard's (1975) analysis of typical classroom talk called the IRF model (teaching Initiation; student Response; Teacher Feedback). Do you see similar types of patterns in this video? Which part?

5. Watch second part of the video again (after the teachers have left), focusing on the amount of talk of each participant.

6. Who does the most talking? Are there any moments of silence? Who decides the conversation topics? What happens?

7. Theorists show that conversations are usually naturally-occurring with rules which speakers are not necessarily conscious of. These include rules related to turn-taking and social norms. Do these students show interactional competence? Why? Why not? Do they deal with awkward silences and topics? How' What is their strategy in generally sustaining the conversation?

8. What conclusions can you draw from this case study on optimal ways to design and set up online interaction for language learning? In which video are there more opportunities to develop interactional competence and practice conversational language. Why? What competences are being developed? Which communication skills are being practiced here?

9. In small groups, discuss advantages and disadvantages of the teacher leaving the room during online interaction. Share your key points with the rest of the class.

Suggested final activities:

1) Make a common list of disadvantages of the teachers leaving the room (compiled from your group work) and think of strategies to overcome these.
2) Ask students to develop scaffolding materials for pre and post task online activities for this telecollaborative exchange.
3) Give students a text about 21st century competences and ask students to improve the design of this task to deal with at least one 21st century competencies.

Suggested reading:

Fajardo, A. (2008). Conversation analysis (CA) in primary school classrooms. *HOW: Colombian Association of Teachers of English Journal, 15*(1), 11-27.

Huth, T. (2011). Conversation analysis and language classroom discourse. Language and Linguistics Compass, 5(5), 297-309.

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to research on plurilingual education / Enfocaments qualitatius per a la recerca en educació plurilingüe / Enfoques cualitativos para la investigación en educación plurilingüe (p. 403-417). Dublin, Ireland/Voillans, France: Research-publishing.net.

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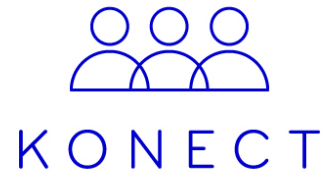
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