

Full Length Research Paper

Using Virtual Exchange to Foster Global Competence and Collaborative Leadership in Teacher Education

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Virtual exchange is a technology enhanced educational platform that makes it possible to connect classrooms and educators across geographic borders. Often also referred to as “telecollaboration” and other variations, virtual exchange offers educators opportunities to collaborate with other teacher educators cross culturally in their efforts to engage a classroom of diverse learners. Around the globe, educators seek to combine virtual exchange and innovative pedagogy to transform classrooms into dynamic places to teach and learn. Despite the positive comments on the pedagogical potential of virtual exchange programs, virtual exchange has not been successfully mainstreamed into formal curriculum and made into a staple of educational practices in P-12 schools. Consequently, few studies exist to explore the experiences of incorporating virtual exchange into formal learning settings where the curriculum is in dire need for instructional innovation in order to move education into the 21st century. This paper presents a study in which virtual exchange is used as an authentic context to expand TESOL (Teaching English to Speakers of Other Languages) teacher candidates’ teaching and collaborative repertoire. TESOL teacher candidates worked in pair, taking turns between facilitating students in cross interaction and chronicling fieldnotes on student engagement. Candidates’ reflective journals and the instructor’s reflective writings and observation notes are used to collect data for this study. Practices and challenges in incorporating virtual exchange into the standards aligned classroom were explored and discussed.

Keywords: virtual exchange, competencies, bilingual education, multilingual awareness

Introduction

Despite its short history, virtual exchange has gone beyond merely a tool used by a small fraction of tech-savvy educators to interact and communicate cross-culturally to a rapidly growing field and practice that allows deep, interactive, social learning and virtual exchange programs have been integrated into all levels of education around the world (Dooly & O’Dowd, 2012). Due to its potential to combine the development of multimodal, communicative competence, intercultural exchange and other aspects of learning, especially language development, the use of virtual exchange has also been incorporated into teacher education in helping pre-service teachers expand their repertoire to engage students and transmit global learning to their future students. For example, the SUNY Center for Collaborative Online International Learning (COIL) has been successful in using technology as a platform for experiential cross-cultural learning for pre-service teachers.

Despite the positive comments on the pedagogical potential of virtual exchange, few research studies in P-12 education exist to investigate the success and challenges which teachers have experienced in their use of virtual exchange in P-12 schools where a standard-based, test-driven school culture may not leave much wiggle room for innovative pedagogical practices. Studies show that virtual exchange is still very often used as a peripheral add-on activity in the classroom and has not been fully integrated into school curriculum (O’Dowd, 2018; Helm, 2014). This research gap in the field of virtual exchange is even more surprising when existing research studies have reported on the increased use of different virtual exchange projects in primary and secondary education (O’Dowd, 2018; Helm, 2014).

According to O’Dowd’s (2018) comprehensive study on the recent history of virtual exchange programs with special focus on the role of UNICollaboration in driving the development of virtual exchange, the current practices of virtual exchange in

primary and second education are mostly provided by what he called 'service-providers' such as iEARN, Soliya and Global Nomads Group, which provide ready-made virtual exchange environments where teachers can simply sign up, and choose a pre-designed activity which best aligns with their school curriculum and then participate with global partner classes to complete the activities. However, their study does not explore teachers' experience in integrating virtual exchange into formal education and their successes and challenges herewith.

As younger children today are hard pressed to develop 21st century skills (e.g. cross-cultural communication, collaborative problem solving, team work, etc.) that enable them to engage with differences more positively and to become active global citizens, it is more urgent than ever that teachers are equipped with knowledge and skills to enhance students' 21st century skills through the use of appropriate digital technology and pedagogical innovation. This study wishes to contribute to this field of study by investigating teachers' experience in using virtual exchange to support the education goals of the P-12 school system and help school age children reach their learning objectives.

Literature Review

In light of the gap in our knowledge of P-12 education teachers' experience in using virtual exchange in formal learning, it is important to explore the practices and challenges of integrating virtual exchange into P-12 schools in the U.S., and to identify barriers that teacher practitioners have and may encounter. To what extent can virtual exchange be integrated into school curricula and what kinds of support should be offered for both teachers and students? What is virtual exchange's perceived potential and implications for educational benefits and competence development for students?

Instead of dedicating its focus to the broad spectrum of issues arising in the application of virtual exchange to P-12 schools, this literature review is organized around the following intersecting dimensions of virtual exchange and formal learning, namely: (a) skills and competences sought to address in virtual exchange programs, b) Teachers' competence in digital pedagogy and finally, (c) the practices and challenges of virtual exchange in the standards-aligned classroom.

Fostering Global and Intercultural Competency.

As reported in the number of publications describing virtual exchange projects in diverse school settings, virtual exchange provides opportunities for learners to participate in intercultural dialogue across geographic distance and therefore, may enable growth of empathy towards cultures different from their own. As shown in O'Dowd's (2003), Patterson, Carrillo and Salinas (2012), Evaluate Group (2019), most virtual exchange programs have a strong intercultural component, with learners engaging in tasks designed by instructors to sensitize students to cultural differences. Research on projects focusing on intercultural learning is generally based on

sociocultural frameworks, highlighting concepts such as "critical cultural awareness", "intersubjectivity" and "cross-cultural capability" (O'Dowd', 2003, p. 120), to examine the role and development of cross-cultural competence (Patterson, Carrillo & Salinas, 2012). Research also has found that in addition to building strong rapport among participants, virtual exchange allows for negotiation of meaning and form, which in turn, fosters the development of linguistic competence (Kern, 2006; Fredriksson, 2013).

The global competency that many virtual exchange programs sought to address is perfectly in line with the State Standards frameworks such as the Common Core State Standards, which has been adopted by 41 states in the U.S. (National Governors Association, 2010). The Common Core State Standards, regardless of the subjects, aim to ensure that students gain relevant skills and knowledge critical in real world settings (CCSSO, 2012). According to Jackson (2012), the adoption of the Common Core State Standards (CCSS) in P-12 schools throughout the U.S. has offered educators unprecedented opportunities to integrate globally competency skills with academic skills and core content needed to prepare all students for the global era. In concert with clear expectations for reading, writing, speaking, listening, language, and mathematics, for example, the expectations outlined in the CCSS include the development of students' abilities to think critically, communicate effectively and solve problems creatively that have taken place in real world contexts.

Unfortunately, formal education offers students few real-world learning opportunities as part of the school curriculum. The Common Core Standards offer almost no guidance or framework for informing lesson planning to engage students in tasks with real-world connections. Spratt (2014) reported that educators often lack the required skills to navigate cross cultural settings to develop, deliver and assess lessons to address global and cultural competency.

Given this gap of knowledge and skill sets in this field, incorporating virtual exchange into standards-aligned classrooms can be used to provide global collaborative opportunities to connect learners from diverse cultures in authentic contexts of learning and to foster global competence, international mindedness, and collaboration.

Second/Foreign Language Competency and Multilingual Awareness

According to the Evaluate Group's *Evaluation of Virtual Exchange on Initial Teacher Education* (2019), the use of second/foreign language to communicate in virtual exchanges compels linguistic awareness in response to various communication demands in different global contexts. Various reports show that virtual exchange participants frequently report gains in second/foreign language competency, as they develop the ability to interact and communicate with second/foreign language speakers and acquire the ability in understanding how different cultures relate to each other

(O'Dowd, 2018; Soomro, Kazemian & Mahar, 2015). As language skills are fundamental to school subjects learning, virtual exchange provides learners a learning environment to practice ways in which meanings are made and interpreted in cross cultural communicative contexts.

This consideration for linguistic awareness and competency development as an important skill to navigate globally seems well represented in the Common Core State Standards for World-Readiness Standards for Learning Languages, which support language development along with other goals areas for learning languages, such as cultures, connection, comparison. Heining-Boynton and Redmond (2013) wrote that the education of world language can support and must go hand in hand with the Common Core curriculum in grades P–12, citing the national statistics report that approximately 8 out of 10 Americans speak only English. However, in many schools across the United States, because of a mismatch with traditional foci in the P-12 standard course of studies, there are very few materials for teaching about the nature of language and world languages. As released by ACTFL (American Council on the Teaching of Foreign Languages) in 2010 that supported similar statements from the National Education Association, high school graduates often graduated without being able to communicate in the most basic of ways with those who speak little English, even after multiple years' study in foreign languages (Heining-Boynton & Redmond, 2013; ACTFL, 2010). High quality language education resources, materials, and teacher professional development are required to help teachers develop knowledge and expertise moving the student forward toward increased language proficiency.

As we endeavor to prepare students to become global citizens, virtual exchange programs can be used to support and are aligned with the Common Core by offering an ideal combination of practicing language skills and acquiring cultural competence as it provides an educational platform to allow participants to “communicate and to learn to respond appropriately in a variety of cultures” (National Standards in Foreign Language Education Project, 1999, p 245). Virtual exchange programs provide a learning environment that is more authentic and more advantageous to engage learners in interaction in authentic L2 discussion. Well-designed virtual exchange activities incorporated into school curricular can have both pedagogical objectives and the potential to allow for student-led discussion agendas and sustain motivation in language learning.

Authentic learning and learner autonomy.

In addition to helping increase and sustain second language learners' motivation, virtual exchange programs can be assumed to offer various beneficial opportunities to push for more authentic and learner centered learning. In order to maximize interaction, many virtual exchange programs require learner autonomy to promote learning in multimodality and multiliteracy. Maina, Wagacha and Oboko (2017) showed how virtual exchange can be incorporated into flipped classrooms

and reported that by having students conduct research on their own before they come to class, virtual exchange promotes peer-to-peer collaborative inquiry that are constructed to simulate autonomous learning required of students in the global era.

The Common Core standards, likewise, expect learners to apply learning to the real world and experience the positive results of their efforts. Across the Common Core Standards, skills critical to each content area, such as problem-solving, collaboration, communication, and critical-thinking skills are emphasized and interwoven into the school curriculum (National Governors Association, 2010).

Interactive virtual exchanges are in line with the core tenets of the Common Core. For example, by allowing students to gather information for their projects from real environments and situations, such as ‘teleconferencing’ with people working in the field relevant to their projects, virtual exchange promotes active learning environments and can help students integrate core knowledge and skills to lead to real world discoveries and enhance their learning.

Teachers' Competence in Digital Pedagogy

While virtual exchange has been found to be motivating for learners, to promote and sustain motivations and to build positive interaction and collaborative relationships with their peers to solve problems cross-culturally, meaningfully incorporating virtual exchange activities in the classroom requires teachers' careful planning and the ability to navigate technology effectively to create a productive virtual learning environment for students.

In their literature review where they focused on developing a synthesized model of digital competence in teacher education, McGarr & McDonagh defined digital competence as more than just the ability to use software or operate digital devices and largely reflecting broader dimensions beyond digital skills to include a large variety of complex skills –emotional, social, cognitive, etc.– users need to have in order to use digital environments effectively (McGarr & McDonagh, 2019). Tondeur, Van Braak, Sang, Voogt, Fisser, & Ottenbreit-Leftwich also recognize that pre-service teachers need to master “content and delivery methods that prepare them to integrate technology into their future classrooms” and aligning theoretical and practical knowledge through the use of digital technology (Tondeur et al., 2012, p. 141).

Several studies also emphasize that teacher education programs must incorporate digital competence in order to develop teacher candidates' global competence studies (Kirschner & Davis, 2003; Valcke, Rots, Verbeke, & van Braak, 2007; Polly, Mims, Shepherd, & Inan, 2010). However, research on teacher education still depicts an overall lack of digital knowledge, skills and competency among teacher candidates and teacher educators to use technology effectively in a pedagogical and didactic manner (Tømte, 2013; McGarr & McDonagh, 2019). This lack of digital competence may undermine teachers'

efforts to promote student learning and equip students with the necessary digital skills and attitudes to succeed in the 21st century workplace and society.

Due to the rapid development of digital technologies in today's globalized world, a 21st century education requires teacher candidates' the ability to employ a variety of integrated skills in order to be prepared for the classroom of tomorrow (Alviram & Eshet-Alkalai, 2006). Similar studies also illuminate the importance of the teacher as a digitally competent role-model for students' learning and conclude that educating global competent students must start with teacher candidates during their teacher education (Valcke, Rots, Verbeke, & van Braak, 2007; Polly, Mims, Shepherd, & Inan, 2010).

The Challenges of Integrating Virtual Exchange in Standards-Aligned Classroom

As Lamy and Goodfellow (2010) pointed out, challenges in integrating virtual exchange in the classroom can be attributed to a wide range of factors. For this study, I adapted the framework developed by O'Dowd and Ritter (2006) based on their review of the virtual exchange literature and only focus on the following levels that can be contributed to the successes and challenges in virtual exchange: the individual, socio-institutional and interaction. Each factor can be characterized as follows:

The individual level includes teacher candidates' intercultural communicative competence, their knowledge, their motivations, and their expectations. Also included on this level are teachers' knowledge and perceptions of cultural and linguistic diversity. Several studies reveal that teachers' beliefs and disposition about language and diversity may impact learning expectations and opportunities for translating conceptual multicultural education into instructional possibilities and tapping into classroom diversity as learning resources (Gay & Kirkland, 2003; Vázquez-Montilla, Just & Triscari, 2014).

Unfortunately, as Vázquez-Montilla, Just & Triscari reported, teacher education often has few high-quality opportunities for guided practice in developing cultural critical consciousness and self-reflection (Vázquez-Montilla, Just & Triscari, 2014). This can be corrected by instructors in teacher education programs incorporating virtual exchange and other accessible and practical approaches to help preservice teachers develop globally minded knowledge, skills and cultural critical consciousness. If these approaches to global competency development are cultivated and modeled across the teacher education curriculum, they will set a foundation and precedent for teacher candidates to use in their own classrooms. Several studies have similarly suggested that teachers who have had exposure to diverse cultures through intense social interactions and exchanges have an increased chance of developing positive beliefs and attitudes towards diversity and embracing

diversity in the 21st teaching and learning (Polly, Mims, Shepherd & Inan, 2010; McGarr & McDonagh, 2019).

On a socio-institutional level, the tasks, the matching of learners, and the group dynamics, or even teacher-to-teacher relationship may determine the outcome of virtual exchange interactions. This may also include the virtual environment mediated by technologies and their design, the general organization of the lessons including lesson objectives or goals, school calendars, teacher hours, language policies, and recognition of student participation in virtual exchange activity. As O'Dowd and Ritter (2006) indicated, participating teachers' limited or even lack of access to digital technologies for teaching and learning could contribute to some challenges connected to the implementation of virtual exchange in the classrooms.

On an interactional level, O'Dowd and Ritter in their study on virtual exchange programs identified cultural differences in communication styles and behaviors, such as different attitudes to cross cultural communication (O'Dowd and Ritter, 2006). Perhaps the greatest challenge on an interactional level is getting participating teachers and students to go beyond superficial social exchange so that they can create meaningful interactions with their global partners. This is often the case with virtual exchange in language classes, as language pedagogy usually still focuses primarily on the mechanics of language skills and often misses opportunities for fostering rich, interactive, meaningful and sustained intercultural learning afforded by virtual exchange. As Ware (2005) states in her study, helping pre-service teachers develop a deeper understanding of other cultures is no doubt one of the most important skills they will need to meet future challenges. Virtual exchange provides a practical and accessible way in which this new level of understanding of cultures around the world might be attained (Ware, 2005).

While these three analytic levels provide a useful lens through which to examine and evaluate the success and challenges in virtual interactions, it should be emphasized that it is important not to see each in exclusiveness from each other; rather, often it is a combination of interconnected factors that leads to challenges and issues in virtual exchange.

Research Question

The aim of this study was to explore success and challenges of virtual exchange in formal learning. In light of the above literature review, the research question we seek to answer in this paper is as follows:

Minimizing technological challenges, what are the success and challenges of virtual exchange on individual, socio-institutional and interactional levels?

Methods

Background

In this paper, I studied three groups of TESOL teacher candidates who incorporated virtual exchange in the school standards-based curriculum. The candidates were mostly full-time NYC elementary general education teachers, who were pursuing a teaching certificate in TESOL in order to better serve an increasingly diverse student population at their schools.

The current study is part of the candidates' courseworks toward their TESOL certification. To foster candidates' cultural and global competency and illustrate teacher candidates' knowledge on how to pursue their own action research for their own future professional growth and development, the fieldwork project combined action research via virtual exchange, field observation and student interviews. Virtual exchange provides an authentic context for teacher candidates to explore the challenges and strengths of ELLs/MLLs (English Language Learners/Multilingual Language Learners) in live language exchange that aims to nurture collaborative relationships and intercultural understanding.

For this course, in order to minimize the unreliable and disruptive potential of technology, Empatico was used as a tool to implement the virtual exchange. Empatico provides an all-inclusive educational platform that allows teachers to connect their classroom with other classrooms around the world through live video and to support virtual exchange experience. Empatico provides free resources, lesson plans and activities geared towards students ages 6-11, which can be easily adapted to align to latest state standards and learning outcomes. Each of Empatico's lesson units includes a preparation activity before the interaction, an "interact" activity during the interaction and a reflection activity after the interaction. Candidates are encouraged to modify or extend the connection to meet their students' needs.

In this study, TESOL teacher candidates were encouraged to work in groups of two to three people, so that while one can facilitate the virtual exchange interaction, the others will observe and take field notes on the exchange. Candidates were also required to interview one or two of participating second language speaking students as part of a study that explores second language learning in relation to a topic of their choice. Teacher candidates' reflective journals, student interviews and the instructor's reflective writings and observation notes were used to collect data to address the above research questions.

To proceed with their studies, U.S. TESOL candidates connected with a global partner through Empatico by creating a free account and expressing their interest in virtual exchange. Empatico then emailed the account creator with potential matches. Teachers were matched through Empatico where they exchanged personal/work email addresses as well as cell phone numbers, if desirable. Once information was exchanged,

participating teachers started to plan lessons together by coordinating times they could all collaborate on the lesson. Having an open communication line in which the participating partners were readily accessible makes collaboration easier for them.

Case Study A (Ms. Hendrickson & Ms. Montoya)

Participants. Ms. Hendrickson and Ms. Montoya connected with Sra. DeLeon from Puerto Rico through Empatico. Both groups of teachers planned the lesson they would follow along with the implementation of the virtual exchange. The lesson was centered around three content vocabulary words— identity, membership and belonging— included in the fifth-grade community unit aligned with Ms. Hendrickson and Ms. Montoya's school curriculum, in which students discussed what makes a community in their respective countries.

Participants in this study included 18 New York City elementary school students (8 females, 11 males, fourth grade), and 34 Puerto Rican elementary school students (18 females, 16 males, fourth grade), with some of whom participating in an individual interview following the exchange. Parental and participant consent was secured prior to the exchange for students to participate in this study in order to allow parents to have a say in their child's participation. Those who did not obtain the parental consent were excluded in this study. Participants from New York City were mostly bilingual in English and Spanish, with a variety of levels in literacy and language skills. Participants in Puerto Rico were also bilingual learners, with an above average literacy and language skills level in Spanish and limited proficiency in English literacy and language skills.

Procedure. Prior to the interaction, NYC students were shown a map in order for them to understand Puerto Rico's location. Many students were able to relate because some of their parents were from Puerto Rico, which created a sense of motivation in the room to participate. In preparation of the exchange, students were first taught the vocabulary words in the usual routine they are taught in their usual classroom setting. Immediately prior to the virtual exchange lesson, students were given a pre-quiz on the content vocabulary words. This was to create a baseline of data to see if the students' understanding of the vocabulary words progresses. Then, the virtual exchange was setup between the teachers in NYC and Puerto Rico. Students then entered the room at the appointed time. Each group of teachers went around the room and invited students to introduce themselves. Teachers then started the lesson by asking "What is your community like?" Students from both classes shared their answers back and forth through the webcam (Appendix A).

With each vocabulary word introduced, teachers then proceeded to ask students to share what they thought each word meant, giving the definition and forming sentences using the words with the class. Once having checked all students'

levels of understanding, teachers formed three groups within their respective classrooms and assigned each group one of the three vocabulary words. Teachers, then, facilitated discussions where students related these words with their respective communities. As a culminating activity, each group created a visual representation for the content vocabulary word they were given. Students were given the following materials to create their representation: posters, markers, magazines, scissors, glue, a tablet (both classes had access to at least five tablets) and various clothing (role play clothes). Groups then presented their representation of the words through the webcam.

After presentations, the virtual exchange ended and students in both classrooms took the post-quiz on the vocabulary words. The post-quiz was the same as the pre-quiz and was used to assess if their learning had improved through the implementation of a lesson through virtual exchange. They reported that there was a slight improvement in students' knowledge of the vocabular words. Eighty-seven percent of the students received a higher score than their previous score in pre-quiz.

Immediately after the exchange, another virtual session was arranged to conduct the student interviews. Five students participated in the interview. Prior to the interview, guiding interview questions were shared between both groups of teachers, who then explained to their respective students what was going to happen during the interview. Since all participating teachers were English-Spanish bilingual, no translation was needed to transcribe the interview.

Case Study B (Ms. Perez & Ms. Bernal)

Participants. Ms. Perez & Ms. Bernal from the U.S. and Mrs. Yamileth Calderon from Columbia connected through Empatico. Through communicating several times over the phone, both groups of participating teachers agreed to work on a lesson focusing on listening actively and communicating respectfully about each other's culture.

Participants included 20 (11 boys and 9 girls, first and third grades) elementary students in Queens, NY and 29 (16 boys and 13 girls, third grade) and elementary students from San Pedro Clavel Barrio of Cali, Colombia. Students from NYC are mostly bilingual in both English and Spanish with a variety of levels in literacy and language skills. Students from Colombia are bilingual students in Spanish, with an above average literacy and language skills level in Spanish, yet a low-level literacy and language skills in English. Ms. Calderon from Columbia is a certified bilingual teacher, who was looking to connect with an English-speaking class to help motivate her students to speak and converse in English.

Procedure. Prior to the exchange, participants were informed that they would be participating on a virtual exchange lesson. Ms. Perez and Ms. Bernal conducted a lesson with their respective students on how to communicate respectfully and have a meaningful conversation with each

other. Students were also given a lesson where they had to practice conversation skills, such as "How is the weather?" and look at the other person and show interest in what they are saying. Also prior to the virtual exchange, students brainstormed questions they would be asking on the day of the exchange.

At the appointed time, participants arrived at a designated classroom for the virtual exchange. The Promethean Board in the classroom had been set up and connected with the partner classroom before the session began. Teachers then proceeded to introduce each other's classes as an introduction to the virtual session.

The lesson was mainly student-led with teachers playing a facilitator role. Through a prior lesson, students had already brainstormed questions to ask. The class maintained a certain level of conversational exchange. While teachers went about and helped facilitate the discussion, students engaged in conversations such as: What do you like to do? What is your favorite cartoon to watch? What is New York/Columbia like? What is your neighborhood or community like?

Their virtual exchange experienced periodic technological disruption. The internet connection was not stable and caused a lot of buffering and interference. There were delayed responses sometimes from both parties.

After the initial exchange, a focus group of 5 students was selected for the purpose of the student interview. This was a 30-minute virtual video exchange. Students all gathered in the library area where sufficient space and flexible seating would be available. The focus group had a planned set of questions that were geared more to the students from Columbia (Appendix B).

Case Study C (Ms. Sipes, Ms. Li & Ms. Gokyuz)

Participants. This virtual exchange was a collaboration between two elementary school teachers in New York, U.S. and one elementary school teacher in Poland for a second-grade social study/math lesson on how to think globally and act locally by participating in the Internet-based Shopping Spree Groceries Project. The lesson objective includes collecting products that students wanted to buy, naming them and pretending to "buy" the products from their lists. The study comprised eight total participants, six of whom were multilingual students at a NYC public school and two Polish students with limited English proficiency from Bilgoraj, Poland. All participants were second grade students. Participants all came from culturally and linguistically diverse backgrounds and had different needs and goals. All students had different levels of proficiency in English.

The specific social study/math topic about shopping was given prior to the exchange, so both of the teachers and students had the time to prepare the lesson in advance. To increase learning and learning transfer, both synchronous and asynchronous learning approaches were utilized. Prior to the exchange,

students were instructed to write in the journal and shared their writings with other students online. The main goal of the exchange was to provide the learners an opportunity to interact and develop their language skills (listening and speaking) during one session and to reflect on their experience through post-lesson reflections (reading and writing).

All participants were directed to interact with each other by the interviewers. Teachers used prompts and questions to navigate the discussion. Throughout the interaction, students were given ample opportunities to discuss about themselves in topics relating to family, school, and work.

Procedure. NYC learners met with their Polish partners for the totality of three forty-minutes sessions via Zoom. Participants were instructed to speak only in English with their international partner to maximize the exposure of L2. In the second Zoom session, the NYC students were asked to complete a reflection in their notebooks. Participants then responded to the open-ended questions asked by teachers to determine in what ways the virtual experience helped support their language learning. After answering the questions, participants were instructed to participate in the third Zoom session in order to reflect on the lesson. During the procedure, several factors were taken under consideration. These factors included the linguistic distance between the two languages, students' level of proficiency in the native language, and their knowledge of the second language. Students' L2 proficiency levels were one of the significant factors in the virtual learning because they affect the analysis of the outcomes. The lesson plan was designed to accommodate students' L2 proficiency levels. The transcription of their interview is included at the end of the paper (Appendix C).

Findings and Discussion

Global and Cultural Competencies.

On the individual level, participating students in all case studies seemed to be motivated to participate in the virtual exchange and enjoy having the opportunity to interact with peers from another country. While it remains to be seen if their initial enthusiasm can be sustained over time (as in most cases, only two or three 40-45 minutes virtual exchange sessions have been conducted), participating teachers eventually overcame their initial scruples when they realized that their students can benefit from being paired with peers where it can be a win-win situation for all students involved. As Ms. Hendrickson reported:

I initially had my reservations on this method, as I was thinking, a person may not be motivated to learn through a virtual exchange classroom, but on the other hand, a significant number of students were able to learn the words through this virtual classroom session.

Data reveals that after a few initial meetings with their global partners, teacher candidates were able to overcome their fear of crossing cultural and linguistic boundaries and started to warm

up to the idea of intercultural communication through virtual exchanges. It indicates that teachers can be unique mediators of cultural and linguistic diversity by incorporating elements of intercultural learning in their everyday lessons and expand their teaching repertoire to better support their students' global education.

On the socio-institutional level, making and maintaining connection with students and teachers in different parts of the world can pose a tremendous challenge on multiple levels, given all of the complications with scheduling, age cohorts, alignment with curricula, and sometimes with access to technology as well. Time zones were often the obvious issue, especially for students at the elementary level. As Ms. Perez reported, it took them several attempts to find a virtual partner due to the time constraints and connecting to a classroom that aligned with what they were looking for (age, grade, language, etc.). In fact, there were TESOL candidates who were excluded from being part of this study because they could only find a U.S. partner instead. Personality clash or compatibility might be a potential issue as well. While we all seek "global understanding", we may tend to be attracted to certain types of people and promote certain types of interactions. Ms. Perez, for example, who has never set foot in Columbia seemed to have established immediate rapport with Ms. Calderon. They have been speaking to each other on a regular basis. As a result, she and Mrs. Calderon expressed strong willingness to continue encouraging students to relate their classroom experience to outside interests and activities.

On the interactional level, the nature of virtual exchange seems to compel a pedagogical shift in classroom culture, from teacher-centered to student-centered. Online interaction promotes a role of facilitating, juxtaposing, interpreting, and reflecting on intercultural experiences for teachers. It also allows them to pay more attention to students' understandings to see if meaning was confirmed, questioned, or contradicted through close observation.

In addition, different kinds of tasks may promote different kinds of interaction in different contexts. Generally speaking, open-ended questions, when used to its full value, often elicit more reflective responses and promote deeper conversation (Yee, 2002; Inoue & Buczynski, 2011). However, due to the student age in Ms. Perez's first grade and Ms. Bernal's third grade classes, the open-ended questions they had brainstormed prior to the class did not do enough to sustain students' interests after a certain point, especially when the conversation was repeatedly interrupted by instability of the internet connection. In contrast, in Ms. Hendrickson and Ms. Montoya's as well as in Ms. Sipes, Ms. Li & Ms. Gokyuz's more language-focused lesson, the conversations were structured around key vocabulary words and theme-based topics, followed by hands-on activities, seemed to have contributed to more constructive conversations.

Language Competency and Multilingual Awareness

Virtual exchange brings relevance and purpose to language learning. Virtual exchange provides opportunities for diverse learners to absorb new concepts and give them opportunities to negotiate differences through cross-cultural conversations, while allowing students to practice their language skills in communicating and learning to respond appropriately in a variety of cultures. That being said, this study leaves open the question of how online interaction translates to language use and development in different contexts.

On the individual level, while their counterpart in Puerto Rico and Columbia were motivated and eager to practice their emerging language skills and express themselves in L2, the U.S. students showed little interest in learning in Spanish from their global partners.

This lack of interest in learning a second or foreign languages can be attributed to the individual as well as on socio-institutional level. As The Evaluate Group (2019) reported, virtual exchange programs can work to enforce monolingual ideology as participants tend to use a foreign language common to all of them, which mostly is English, a “lingua franca”, rather than taking efforts to learn and communicate with native speakers in their native languages.

A lack of evidence in multilingual awareness can be located on the socio-institutional level. For example, teachers’ choice of the task and lesson design may determine the lesson focus and influence students’ attitudes and perceptions about foreign languages. Ms. Montoya and Ms. Hendrickson use of a vocabulary quiz as an assessment tool to measure the success of the virtual exchange presents a powerful portrait illustrating how teachers can be caught in the grip of the monolingual mindset:

We found significant effect from the exchange on learning the new words on their second language, 87% learned and remember the words, 13 % show no motivation and/or shyness and only learned 1-2 words out of the 5. Overall, I found support to my hypothesis that virtual exchange classroom would significantly improve second language acquisition.

The dominating monolingual mindset in the U.S. school cultures may discourage teachers from consciously utilizing the linguistic diversity existing in their classroom as a valuable pedagogical resource. Enhancing teachers’ awareness of the language competences of their students and how to benefit from them, as well as to provide them with useful tools and resources to support them in building their multilingual competence is highly relevant to teachers who are working in culturally and linguistically diverse environments (Cummins, 2005).

An emerging variant on the interactional level is cultural differences in communication styles and behaviors, such as different attitudes to cross cultural communication (O’Dowd and Ritter, 2006). Some of the communication challenges

between U.S. students and their global partners can be attributed to “different countries learn ways of speaking that are situationally appropriate in the community and internalize the social values that community members manifest through talk” (Young, 1999). Ms. Sipes, Ms. Li & Ms. Gokyz suggested that Polish students may be immersed in a community that has different appropriate social competence in comparison to students in New York. Native English speakers from the U.S., for example, can be considerably more informal compared to other spoken languages in school settings. As shown in their case study, Polish students had little to talk back to the U.S. partners, since Polish students may be immersed in a community that is less informal in conversation in terms of interactions with student and teacher.

Authentic Learning and Learner Autonomy.

Virtual exchange can provide students and teachers opportunities to enjoy productive, and sometimes quite long-term, online connections with each other across national borders, especially for those students who could not afford to travel past the border of their own communities and see the world for themselves. Virtual exchange affords teachers and students opportunities to connect with real audiences and problems through virtual visits, field trips, and exchanges. During Ms. Perez and Ms. Bernal’s virtual exchange lesson, students drove the questioning, asking real-world questions such as, “Who is your favorite character from PJ mask?”, “What do you like about Marshall from paw patrol?”, “Do you like Lightning McQueen?”, “Do you think Lightning McQueen is the fastest car?”, etc. This virtual exchange in the classroom inspired and empowered these students to make a clear connection between learning in the classroom and real life.

On the individual level, through implementing virtual exchange, participating teachers also have developed their own drive for autonomous learning. Knowing the world is within your reach can empower learners and foster autonomy. Autonomous learning attitudes drive people to keep going even in the face of setbacks, to take up opportunities, and to show commitment to what they want to achieve, as is evidenced in Ms. Perez’s reflection:

This tool has shown that you can easily increase language learners’ motivation. ELLs’ had opportunities to interact with peers outside the classroom on a global scale to develop a flow with an exchange of words based on interests ... Mrs. Calderon and I will continue to participate in virtual video exchange to help increase fluency among her students. My ELL students can benefit with increase listening and verbal skills.

On the social-institutional level, Ms. Hendrickson and Ms. Montoya successfully connected their fourth-grade class with students in Puerto Rico to learn more about their culture:

Their excitement was shown to increase when they were introduced to students through the virtual exchange. The room was filled with excitement when they were first introduced and students couldn’t wait to introduce themselves through the

webcam. This excitement around the social interaction only increased as they formed their groups and couldn't wait to show off their representation of the vocabulary word.

Without their realizing, both teachers and students were able to engage in "public diplomacy" and have taken the opportunities where people from disparate cultures can come to understand each other. Tomorrow's teachers must have access to tools and platforms that provide opportunities for authentic engagement and youth-led dialogue.

On the interactional level, data shows that virtual exchange expanded opportunities for autonomous learning. According to Vygotsky (1962), it is through interaction that learners can get an effective feedback in communication and internalize learning through social interaction. Ms. Sipes, Ms. Li & Ms. Gokyuzy cautiously concluded from their case study that

Virtual exchange can improve second language acquisition via a sociolinguistics standpoint. From the objective of the lesson, students were able to name things they "shopped" for and discussed the differences between what students bought from New York versus what students bought from Poland.

It can be assumed that intentional interactive practice can promote learner autonomy since learners develop the identity to be able to communicate with those like them and this provides them the motive to become as proficient as their native speaking peers.

However, for many of today's schools, "real-world learning" has often only been seen as something for advanced learners in formal education, an extension exercise as a privileged right for a small group of "talented and gifted" students. This has caused many students, but especially ELL/MLL learners, to be less prepared for the real world than ever. This is often due to the all-too-frequent lack of multilingual awareness on the part of teachers or school administrators. As a result, in the traditional classroom, English or multilingual language learners often only take a passive role in the learning. This study suggests that presenting core content with real-world connection for all students will lead to engaged learners who will be interacting at a deeper level with their learning.

Limitations

The study presents several limitations. First of all, there were issues in terms of representativeness. Due to the challenges in scheduling, and complications related to differing school calendars and curricula, many teacher candidates were not able to find a global partner to collaborate with and this significantly compromises the representativeness of this study. Only those who have collaborated with a global partner were selected to participate in this study. Likewise, because of the time for completing the cycle among connecting, planning, preparing, implementing and reflecting, only a few groups of participating teachers managed to conduct more than two virtual exchange sessions with their global partners, the rest could only have time to do two virtual exchanges.

Consequently, the results were not balanced and reflected a lack of representativeness. Clearly, participating teachers' geographic locations (i.e. U.S.) led to greater responses from some countries (Central and South America) than others.

In regard to the data collection tools, though they were piloted and reviewed, the wording of the interview questions (available in both languages, as at least one participating teachers from each group is a Spanish English bilingual) were still too difficult for students' language proficiency and presented a language barrier to elicit informative responses from students, especially English language learners.

Finally, this is a qualitative study. Hence it does not address any quantitative aspects of virtual exchange. The aim was rather exploratory and seeking to engage teacher candidates' global competence and provide a broad overview of how teacher candidates navigate different levels of practices and challenges in their attempts to incorporate virtual exchange in their classroom, which was missing from the virtual exchange literature.

Conclusions

This study has attempted to contribute to a deeper understanding of incorporating virtual exchange in the formal school setting whether it can be used to foster the core knowledge and skills, the perceived value and learning outcomes as well as shared challenges in empowering our students with 21st-Century skills for an ever globalized society.

Continuing to expand our knowledge base in this area is important in allowing us to define common strategies to support educators in the practice of virtual exchange and to achieve greater integration within the school curricula and to suggest avenues for future research. As an imperfect and pilot effort in this direction as it is, this study, nevertheless, allows us to suggest avenues for future research.

One rich area for future research is language tensions and the dominant role of English as a lingua franca in virtual exchange interaction, how this is or could be addressed to foster multilingual awareness and take it to deeper levels. Another important issue is the way participants interact both with and through the mediating technologies and how technology mediates language use, communication, cultural expression, and social meanings on a variety of levels (O'Dowd & Ritter, 2006; Helm, 2015).

At a social-institutional level, the greatest barriers appear to be time, institutional constraints (such as coordinating across different school calendars), assessment requirements as well as a need for teacher training and support. Digital platform and tools are needed to provide support for educators both in the setting up of exchanges and task sequences for exchange projects in different languages, assessment tools, and training activities.

We need further work to be carried out to understand more in depth the impact of virtual exchange beyond the individual studies and outside of educator and student beliefs. Though this need has been recognized in existing literature, more tools and resources need to be sought for accomplishing this. Being able to understand the impact of online intercultural exchange qualitatively as well quantitatively will no doubt contribute to improving the quality of exchanges, and to making it easier to harness environmental support for the field.

References

- ACTFL (2010). *Position statement on language learning for heritage and native speakers*.
<https://www.actfl.org/news/position-statements/language-learning-heritage-and-native-speakers>.
- Aviram, A., & Eshet-Alkalai, Y. (2006). Towards a theory of digital literacy: Three scenarios for the next steps. *European Journal of Open, Distance and E-Learning*, 9(1), 1-11.
- Cummins, J. (2005). A proposal for action: Strategies for recognizing heritage language competence as a learning resource within the mainstream classroom. *Modern Language Journal*, 585-592.
- The EVALUATE Group. (2019). *Evaluating the impact of virtual exchange on initial teacher education: a European policy experiment*. Research-publishing.net.
- Fredriksson, C. (2013). *Learning German by chatting—a study of social interaction and language production in an academic German online course*. ICT for Language Learning, Florence, Italy, 218-222.
- Gay, G., & Kirkland, K. (2003). Developing cultural critical consciousness and self-reflection in preservice teacher education. *Theory into practice*, 42(3), 181-187.
- Halili, S. H., Abdul Razak, R., & Zainuddin, Z. (2014). Enhancing collaborative learning in flipped classroom. *Australian Journal of Basic and Applied Sciences*, 9(7), 147-149.
- Heining-Boynton, A. L., & Redmond, M. L. (2013). The common core framework and world languages: A wake-up call for all. *The Language Educator*, 8(1), 52-56.
- Hampel, R., & Hauck, M. (2006). Computer-mediated language learning: Making meaning in multimodal virtual learning spaces. *The JALT CALL Journal*, 2, 3-18.
- Helm, F. (2014). Developing digital literacies through virtual exchange. *E-Learning Papers*, 38, 1-10.
- Helm, F. (2015). The practices and challenges of telecollaboration in higher education in Europe. *Language Learning & Technology*, 19(2), 197-217.
- Inoue, N., & Buczynski, S. (2011). You asked open-ended questions, now what? Understanding the nature of stumbling blocks in teaching inquiry lessons. *The Mathematics Educator*, 20(2).
- Jackson, Anthony, (January 27, 2012). Common Core: Preparing Globally Competent Citizens, Education Week. Retrieved from http://blogs.edweek.org/edweek/global_learning/2012/01/the_common_core_state_standards.html
- Kern, R. (2006). Perspectives on technology in learning and teaching languages. *TESOL Quarterly*, 40(1), 183-210.
- Kirschner, P., & Davis, N. (2003). Pedagogic benchmarks for information and communications technology in teacher education. *Technology, Pedagogy and Education*, 12(1), 125-147.
- Lamy, M., & Goodfellow, R. (2010). Telecollaboration and learning 2.0. In S. Guth, & F. Helm (Eds.), *Telecollaboration 2.0: Languages, literacies and intercultural learning in the 21st century* (pp. 107-138). Bern, Switzerland: Peter Lang.
- Maina, E. M., Wagacha, P. W., & Oboko, R. O. (2017). Enhancing active learning pedagogy through online collaborative learning. In *Artificial Intelligence: Concepts, Methodologies, Tools, and Applications* (pp. 1031-1054). IGI Global.
- McGarr, O., & McDonagh, A. (2019). Digital competence in teacher education, Output 1 of the Erasmus+ funded Developing Student Teachers' Digital Competence (DICTE) project, 2019. Retrieved from <https://dicte.oslomet.no>
- National Governors Association. (2010). *Common core state standards*. Washington, DC.
- O'Dowd, R. (2003). Understanding the "other side": Intercultural learning in a Spanish-English e-mail exchange. *Language learning & technology*, 7(2), 118-144.
- O'Dowd, R. (2018). From telecollaboration to virtual exchange: State-of-the-art and the role of UNICollaboration in moving forward. *Journal of Virtual Exchange* 1, 1-23.
- O'Dowd, R. & Ritter, M. (2006) Understanding and working with 'failed communication' in telecollaborative exchanges. *CALICO Journal*, 61(2) 623-642.
- Patterson, L. M., Carrillo, P. B., & Salinas, R. S. (2012). Lessons from a global learning virtual classroom. *Journal of Studies in International Education*, 16(2), 182-197.
- Polly, D., Mims, C., Shepherd, C. E., & Inan, F. (2010). Evidence of impact: Transforming teacher education with preparing tomorrow's teachers to teach with technology (PT3) grants. *Teaching and Teacher Education*, 26(4), 863-870.
- Soomro, S., Kazemian, B., & Mahar, I. (2015). The importance of culture in second and foreign language learning. *Dinamika Ilmu: Journal of Education*, 15(1), 1-10.
- Sprott, K. (2014). Culturally competent common core practices: A Delphi study. *Journal of Research Initiatives*, 1(2), 8.
- Tømte, C. E. (2013). Educating Teachers for the New Millennium?-Teacher training, ICT and digital competence. *Nordic Journal of Digital Literacy*, 10, 138-154.
- Tondeur, J., Van Braak, J., Sang, G., Voogt, J., Fisser, P., & Ottenbreit-Leftwich, A. (2012). Preparing pre-service teachers to integrate technology in education: A synthesis of qualitative evidence. *Computers & Education*, 59(1), 134-144.
- Valcke, M., Rots, I., Verbeke, M., & Van Braak, J. (2007). ICT teacher training: Evaluation of the curriculum and training approach in Flanders. *Teaching and teacher Education*, 23(6), 795-808.

- Vázquez-Montilla, E., Just, M., & Triscari, R. (2014). Teachers' dispositions and beliefs about cultural and linguistic diversity. *Universal Journal of Educational Research*, 2(8), 577-587.
- Vygotsky, L. S. (1962). *Thought and Language*. MIT Press.
- Ware, P. D., & Kramsch, C. (2005). Toward an intercultural stance: Teaching German and English through telecollaboration. *Modern Language Journal*, 89(2), 190-205.
- Yee, F. P. (2002). Using short open-ended mathematics questions to promote thinking and understanding. In *Proceedings of the 4th International Conference on The Humanistic Renaissance in Mathematics Education*, Palermo, Italy.
- Young, R. (1999) Sociolinguistic approaches to SLA. *Annual Review of Applied Linguistics*, 19, 105-132.

Appendix A

Sample Virtual Exchange Lesson Plan

Empatico Virtual Exchange Vocabulary Lesson	
Teachers: Ms. Hendrickson, Ms. Montoya and Sra. DeLeon	
Learning Target: I can understand the vocabulary associated with a community.	
Language Objective: I can work together in a group to show the meaning of a vocabulary word.	
Standards	W.5.2.D Use precise language and domain-specific vocabulary to inform about or explain the topic. L.5.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases.
Vocabulary	Identity, Membership, Belonging
Materials	<ul style="list-style-type: none">• Chart Paper/Whiteboard• Virtual Exchange Method (Facetime Video, Webcam, Computer)• Project Materials: posters, markers, magazines, scissors, glue, an iPad and various clothing (role play clothes)
Connection	Connect with class in Puerto Rico and go around to introduce students. Have students discuss how their respective communities look like. <ul style="list-style-type: none">• What do you see in your community?• Do you know everyone in your community?• How do you know you are a part of your community?
Teach	Write down/show each vocabulary word one by one. Follow procedure: <ul style="list-style-type: none">• Break down the word into syllables• Think/Pair/Share to a partner what you think this word means• Give students formal definition of the word
Engage	Group students into three groups. Each group will be assigned one of the vocabulary words taught. Students will be directed to create a project in any way they would like that represents their given vocabulary word. Give students examples: <ul style="list-style-type: none">• Taking the posters and creating a collage with the magazine pictures of what their word looks like in their community• Taking the iPad to create a PowerPoint/keynote presentation with pictures from the internet• Taking the clothes to put on a skit of how their vocabulary word can be used and in which scenario it could be used
Share Out	Students will share out and present their projects to the other class in the other country and their peers.
Closure Assessment	Students will take the post-quiz of the vocabulary words. The post-quiz will consist of the same questions they were asked in the pre-quiz to assess if they improved in their knowledge of vocabulary from prior to the lesson.

Appendix B

Sample Guiding Questions for Student Interviews

- What did you learn during this lesson?
- How did the virtual exchange help you learn English?
- What do you remember most about the lesson?
- What have you learned from the lesson? What caught your attention?

Appendix C

Anecdotal of Student Interview

Student Interview		
Participants:		
(NYC) Student A Student B Student C	(Poland) Student X Student Y	Interviewers: Ms. Sipe (Head Teacher) Ms. Li Ms. Gokyuz
Notes: Students were arranged to meet together for the third time. Students from both sides have participated in the lesson previously. Interview was scheduled the day after the exchanges took place. All students and interviewers participated from the setting of their home. All students from New York are English Language Learners in bilingual Polish classroom in a NYC public school.		
<p>The meeting started with students A and B. Students exchanged pleasantries and then Student X and Y joined the call. The interviewers introduced students from both sides and were asked to say hi. The interview started with Gokyuz asking Student X and Y how old they are and what are their names. Student X replied with “I am seven years” and “My name is Jakub”. Student Y responded after Student X with “My name is Veronica”. Gokyuz asked where the students X and Y live. Both students didn’t reply. Students X and Y looked at the camera and back. Gokyuz asked the students again by rephrasing the question: Do you live in New York or in Poland? Student X replied by saying “I don’t understand” in Polish. Gokyuz asked the question again, “Poland? Or New York?” Student X replied with “My from is Poland”. “You live in Poland”, said Gokyuz. She continued with “What grade are you in? Are you in second grade?” She also indicated two fingers for him to see. Student X did not reply.</p> <p>Student C entered and introductions were made again. The interview continued with Li asking Student X, “What is your favorite word in English?” Student X did not reply. He stated “I don’t understand” in Polish. The question was asked again by Sipe in Polish. Jakub slowly replied “Ball”. “Do you listen to English songs, Jakub?” asked Li. Student X replied “Yes”. “What type of English songs?” “Hip Hop”. “Do you learn English songs in class?” “Yes”. “Who teaches it you? Your friends or your teacher?” Student X replied, “Yes”.</p> <p>Student A, B, and C were then asked if they had questions to Student X. Student A initiated and immediately asked in Polish, “Jakub, what do you like to do the most?” “I like to play football (soccer)” Student A excitedly replied with “Me, too!” in Polish.</p> <p>Sipe initiated for Student X and then asked students A, B, and C. Student X asked “How old are you?” in English. Student A replied, “I’m eight” while Student B and C say “Eight”. All replies made were in English. Sipe encouraged Student X to ask students A, B, and C something else. Student X replied with “mmm... I go to school”. Sipe asked students A, B, and C, “Do you guys to school?”</p> <p>Student X was asked if he had anything else to add. He stated, “I like play football”. Sipe asked if any of them also enjoy playing. Student A said, “I do!”</p> <p>In Polish, Student B asked, “What sport do you play?” Sipe reminded him to ask in English. He asked again. Student X responded with “Play football”. Student C then asked student X and Y how old they were. Student X replied with “I am seven years”.</p> <p>Interviewers continued with the interview questions and asked, “Do you play games in the classroom?” Student X and Y said they don’t understand in Polish. Students A, B, and C replied “Yes!” and started to explain the game ‘supermarket’ that was played yesterday. Student B started explaining step by step how the game was played and what happened with details. Student C shared what she had ‘bought’ for that game by listing the items one after another. Student A initiated that he wanted to share by raising his hand. After been acknowledged, he shared what he had selected by listing them one after another. Student X was also asked what he’d like to buy. Initially asked twice in English, he replied with “I don’t understand”. Student A initiated by saying “I can tell him” in Polish. Sipe told him to go ahead. In Polish, Student A asked Student X “What do you like to buy?” Student X was able to reply in English by listing the items one after another. Gokyuz asked, “I like yogurt, do you like yogurt?” He answered “Yes”.</p> <p>Then Li asked “Were there any words that you learned,... new to you?” She addressed Student A and Student B by repeating “Did you learn a new word yesterday or did you know all the words already?” Student C said that he knew all the words, Student C listed the words that he learned.</p>		

Next Sipe asked Student B, “Do you remember the word that we learned? Do you remember that I gave 10 dollars, what was the word for?,.... the amount of money you have to spend, the limit?” Sipe asked the same question to Student C, but neither of them could answer. Then Sipe said the answer “bu... budget”

Li continued the interview, she asked “Do you think that this game is hard?” “Does anyone think that the game is hard?” Student B said “No”. Then Li asked why it is so easy for him. Sipe joined the conversation by reminding the activity they did the day before. When Student remembered the activity, he said “The shopping card was easy because we just need to choose some products and then write it down and like... the value of the product and then add altogether the value, the value together.” Li asked “How do you find value altogether?” He said, “I find altogether because I added the numbers, like 1 dollar, 2 dollars, 3 dollars and add the cents at the end.” Sipe informed that Student C wanted to talk, too. She explained but it was hard to hear her.

Li turned to Student X and asked if he thinks the game was hard. Sipe translated and Student X answered “Yeah”. Then Sipe repeated in English “Easy or hard?” Student X said “Easy”. Student X answered in Polish Language saying that he learned many things. He said he learned American culture.

Li called friends from Sipe’s class and asked “Do you have any question for Jacob?” Student B raised his hand and asked “What is Student X’s favorite food?” She waited for the answer and asked it in Polish. Student X answered “Pizza”. Other students said it is their favorite food, too.

Then Gokyuz asked Student X what language they speak in their country. Sipe asked Student A, B and C to translate. Student B wanted to translate but had difficulties. When Sipe helped him, he was able to ask in Polish. Student X answered “Poland”. Gokyuz corrected, “Polish”. Student X repeated, “Polish.” Gokyuz asked if it is a difficult language. Sipe translated but pronounced the word “difficult” in English. Student X said “Yes”. Then Gokyuz asked if English is a difficult language. Student X said, “Yes or No”. Then Gokyuz asked students in New York. One of them said “No”. Gokyuz asked “Do you like school?” Student B said, “Yes”. Gokyuz continued to ask, “Did you miss the school?” She repeated “Did you miss the school, or do you prefer doing the lesson online? All of them said they missed school. They said they missed the classroom and friends. When Gokyuz said “Classroom is better, on the computer it is not good”, Student B jumped and said that “Because it is hard to find the letters on the computer to write a message.”

Sipe asked all of them to remember and tell 3 words that they learned yesterday. Li reminded the word “budget”. Student B said he knew all the words. When Li asked to tell her 3 of them, he said he did not remember. Student A said he forgot. Then Gokyuz reminded them by asking what the lesson was about yesterday. Student B said it was about shopping, and they needed to pick one item, next they needed to add the price and find the sum. Student C joined the conversation and listed 3 products. Student B listed 3 words but not new. Student listed 3 words, too.

Interviewers thanked the students. Sipe praised by calling them “brave kids”. Students from New York talked about their plans for afternoon. Gokyuz asked Student X “When is the over there now?” Sipe translated. He answered “16:42” in English. All participants and interviewers said their farewells.

END