

Concurrent Session 1 并行会议一

Research on West-East Reciprocal Learning in Classroom & Curriculum

课堂与课程设置中的互惠学习

Concurrent 1A: Students' Mathematics Learning 分组会议 1A: 数学学习

Juan Yu

Hubei University of Education, China

A Research on Learning Difficulties and Coping Strategies in Mathematics for Taiwan and Mainland Middle School Students

This is a reciprocal learning research from Taiwan to solve Mathematics learning difficulties for mainland students in China. Based on the learning difficulties and the corresponding coping strategies in mathematics for middle-school students in Taiwan and analyzed the variations with different demographic variables. The research was conducted through questionnaire survey totally 1,020 middle school students participated in the survey, and 999 valid questionnaires were collected. The major findings of research are as follows:

1. The level of learning difficulties of mathematics for students of middle schools was close to mediocre level. The students' scores on "personal factors" respond the highest, but students' scores on "school factors" respond the lowest.
2. There were significant differences in learning difficulties of mathematics of middle school students with different demographic variables.
3. When students encounter learning difficulties in mathematics, they adopt "active coping" as coping strategy, followed by "seeking supports" and "emotional coping"; however, "avoidance" is adopted less than others.
4. There were significant differences in the coping strategies used by the students who have learning difficulties in math with different demographic variables.
5. Learning difficulties and coping strategies have significant correlation.

The research findings show the overall learning difficulties of middle school students is medium (mean= 2.42). Among these factors, the mean score of personal factors shows the highest (mean= 2.67), while the mean score of school factors show the lowest (mean= 2.24). It means that most middle students encounter learning difficulties of math due to lack of interest and motivation in learning mathematics, wrong learning approach and so on. Above five, I suggested to create a reciprocal learning context in the classroom and indicated through collaborative learning mechanism can improve low-achieving students' achievement and promote interpersonal relationship among peers.

Aihui Peng, Li Cao, Bo Yu,

Southwest University, China; University of West Georgia, United Stated

Mathematics Problem Posing and Problem Solving of the Canadian and Chinese Elementary School Students: An Interactive Study between Two Sister Schools

The development of students' abilities to pose and solve problems has remained one of the fundamental goals of school mathematics around the world. A number of comparative studies revealed remarkable differences of students' mathematical thinking and reasoning in mathematical problem posing and problem solving (Cai, 2004; Jiang, Hwang, & Cai, 2014). Such differences reflect various students' learning opportunities in different educational systems and cultural backgrounds. The current study examined how the Canadian and Chinese elementary school students solved mathematics game problems posed by their counterparts. The purpose was to better understand characteristics of mathematics problem posing and problem solving, and identify areas for improving mathematics education in both countries. As part of a larger seven-year Reciprocal Learning Partnership Project between China and Canada (Xu & Connelly, 2014), the study focused on the interactions of elementary school students from two sister schools in Canada and China through Skype meetings. The primary data included recordings of two Skype meetings in which the Canadian (N=20) and Chinese (N=20) 3rd grade elementary school students first posed ten math problems for their counterparts, and then solved the ten math problems posed by their counterparts. Quantitative data analyses focused, first, on sorting out characteristics of the math problems posing of the Canadian and Chinese students, and then on examining differences of math problem solving of the two groups

(See Table 1 and 2 attached below). Qualitative data included observations of the Skype videos, interviews of the math teachers, and students from each school, respectively. Preliminary results showed that the Chinese students posed the mathematics game problems in a wider range of content area than the Canadian students, especially with two of problems situated in real life contexts. Meanwhile, the Chinese students worked individually while the Canadian students worked cooperatively in teams in solving the mathematics game problems posed by their counterparts. Implications and recommendations for improving math teaching in both schools were discussed.

Yanling Wang, Chunying Wang

Northeast Normal University, China; Primary School Attached to Northeast Normal University, China

Design Effective Learning Activities Based on "Knowledge Essence" and "Learning Starting Point" — Taking the Teaching Design of "Area of Circle" in Primary School Mathematics as an Example

In mathematics teaching, effective learning activity design should be based on the essence of mathematics knowledge and the starting point of students' learning. Based on the elementary school mathematics of "the area of a circle" in the field of graphic content, in teaching design, traces the history of the area of a circle to solve first, ancient Chinese Liu Hui, Zu Chongzhi, ancient Greece Archimedes, ancient Indian mathematician, German astronomer Johannes Kepler et method although different, but all have the same "song for straight" train of thought, all involve the focal problem of "infinite proximity". The compilation of "the area of a circle" content in some elementary school mathematics textbooks echoes the development history of solving circular area. Through investigation, it is found that students' existing experience of circle area is uneven. This paper mainly introduces the depends on the nature of knowledge, historical development, textbook and students experience, how to design the mathematics learning "tasks", and in the solution of the "big task", guides the student experience nature of the circular area of "Turn Round to Square, Small Steps, Song to Straight" and the solving process, available for reference in the design of learning activities related to mathematics teaching in primary schools of China and Canada.

Xiaojie Gao, Jing Cao, Yanmei Wang,

Jiefang Road Elementary School, China

Creating Mathematics Classes with Full Vitality

Abstract: Life education is an education that takes life as the main line and people as the center, so that the vitality of life is full, and the flower of wisdom is bloomed. In the mathematics classroom teaching of primary schools, it is the mission of teachers in the new era to adhere to the "people-oriented" educational thinking, and to view primary school mathematics teaching from a development perspective, as well as to construct mathematics classroom teaching from the perspective of life development. "People-oriented, student development as the center" is the main theme of education development in the 21st century. Primary school mathematics classroom teaching under the new curriculum concept should adhere to such a main theme. This article mainly discusses how to build a life-filled mathematics classroom from the following five aspects: First, encourage students to "think with the brain", let students have time to think, and learn mathematics in developing creative thinking. Second, encourage students to "do it by hand", let students experience hands-on practice, and learn mathematics in hands-on operation. Third, encourage students to "see with their eyes", guide students to observe, and learn mathematics in constant discovery. Fourth, encourage students to "speak with their mouths, listen with their ears", let students cooperate and communicate, and learn mathematics in the process of interaction. Fifth, encourage students to "use mathematics" and use the physical objects in life as materials to enable students to learn mathematics in practical applications.

Concurrent 1B: Building School & Classroom Community

分组会议 1B: 建立学校和班级社区

Lisa Coffey, Yeting Wang, Yishin Khoo, Cheng Zhong, Eun Gi Kim

Toronto District School Board, Canada; Huaping Primary School, China; University of Windsor, Canada; East China Normal University, China; University of Toronto, Canada

Teacher Engagement in Reform Initiatives: A Reflective Dialogue between Two Principals on their Leadership Approaches

This paper grows out of a Sister School partnership between an inner-city school in Toronto and a suburban school in Shanghai in the context of the SSHRC Canada-China Reciprocal Learning Partnership Grant project. It aims to present a reflective dialogue that has been carried out between two principals in Shanghai and Toronto on the theme of building teacher leadership. The paper will focus on highlighting what the principals have shared with each other since 2018. It will also illustrate how the

principals have engaged themselves in dialogues and collaborative inquiries on the topic of building teacher leadership. The paper ends with a discussion on the different leadership contexts principals in Canada and China find themselves in, as well as the various lessons Canadian and Chinese school leaders can learn from each other when it comes to advancing instructional capacity and teacher leadership in school-based settings.

Wen Wang, Helen Fenton, Lang Qin, Meng Dai

Huaping Primary School, China; Toronto District School Board, Canada; Ontario Institute for Studies in Education, University of Toronto, Canada; East China Normal University, China

Promoting Students' Self-awareness and Building Confidence in Banhui/Character Education Lessons through Storybooks

Over the 2018/2019 school year, the theme of the cooperative Ban Hui/Character Education lessons at a pair of Shanghai-Toronto sister school is "self-awareness". Supported by the SSHRC Canada-China Reciprocal Learning Partnership Grant Project, the two teachers decided to further explore the theme by collaborating on a project with their students in a Ban Hui class (a Character Education class) in Shanghai and a Language class encompassing Character Education in Toronto. This study discusses the issues with students' self-awareness and how storybooks may enhance the development of self-awareness.

Some of the early findings of this project show that the Shanghai students' self-awareness was single-layered: their perception of themselves and others were largely based on the academic achievement and learning abilities rather than their hobbies, skills, and talents. On the other hand, Toronto students' self-awareness was built from their experiences and activities inside and outside of the school setting, rather than solely based on their academics. A common aspect observed in both classes was that very few students were able to define themselves using character traits. The teachers provide suggestions regarding how students can accept themselves in a score-oriented environment and discuss the ways to include a holistic approach in developing the students' understandings of themselves.

The research questions addressed in this qualitative study are: How do students in both classrooms define themselves? What factors influenced their current definition of "self"? And to what extent will storybook lessons promote students' self-awareness? The methodology for the study is grounded narrative inquiry, which captures different aspects of the lived experiences of the teachers in the context of sister-school partnership. Data collected involve field notes completed from class observations by graduate assistants in the classroom, students' work samples and personal reflections of the teachers in the partnership.

Dr. Darcia Roache

University of Saskatchewan, Canada

How Transformational Leadership in Educational Organizations in Jamaica Affects Twenty-first Century Teachers' Performance

The paper explores how leadership in educational administration affects teachers' motivation and performance. The transformational leadership model theoretical framework as postulated by Bass has guided this presentation. Educational leaders and their leadership styles contribute to the motivation of educators and learners fulfillment of their mandate to educational institutions. Ten participants (administrators and educators), with at least three years of working experience at the post-secondary level, were engaged to in this study to explore human experiences and stories. Clandinin (2007) said narrative inquiry "involves the reconstruction of a person's experience in relationship both to the other and to a social milieu" (p. 5). With this approach, the author sought to collect data from responses to semi-structured interview questions on how leadership in educational administration affects teachers' performance. N-vivo 10 software was used to analyze the data. The result adds to the body of knowledge regarding how post-secondary leadership styles and motivation can transform educational organizations in Jamaica and help form the Ministry of Education policies that regulate and encourage best practices for educational change.

The purpose of this study is to explore how principal leadership style in educational administration affects teachers' motivation and performance in the twenty-first century at educational institutions in Jamaica. It is the hoped that the study will produce best practices needed to enhance teachers' motivation and performance. Furtherance, this study will assist with recommendations for principals to use as strategies to improve their leadership styles to motivate and encourage teachers' performance. Aydin, Sarier, and Uysal, (2013) said principals' leadership style influences teachers' commitment to the institution and the job. When teachers are motivated their performance is also motivated, and so they will work better to achieve the goals of the institution (Smith, 1999).

Transformational Leadership Theoretical Framework will be used. This framework will show that transformational leaders motivate followers to help the growth and creativity of the organization

Gideon Ayobami Adeleke, Deborah Damilola Tunji-Ajayi
Obafemi Awolowo University, Nigeria

Inclusive Education Practices in Nigeria: The Awareness, Implementation and Compliance

This study investigated inclusive education practices in Nigerian elementary schools as prescribed in the National Policy on Education of the Federal Government of Nigeria (2004). It determined teachers' awareness of inclusive education concepts and the extent of implementation of the policy in the specified study area. These were with the view to assessing compliance with inclusive education practice.

The descriptive survey research design was adopted. The 10,574 elementary school teachers in Osun State formed the study population. The study sample comprised 300 school teachers using the multi-stage sampling technique. A state in the federation, one of its three senatorial districts and three Local Government Areas (LGAs) in the senatorial district were randomly selected. Ten elementary schools were randomly selected from each of the three LGAs and ten teachers randomly admitted into the study as respondents from each of the 30 elementary schools. The instrument was a 'Teachers' Questionnaire on Inclusive Education Implementation (TQIEI)'. A self-developed instrument that was subjected to validity and reliability tests in a pilot study prior to the research [result was $r = 0.589$; $r = 0.933$]. Data collected were analyzed using frequency count, simple percentage, mean and standard deviation.

The study revealed that teachers in schools have a high level of awareness (78.6%) of the inclusive education concept. It also indicated teachers' non-compliance and non-implementation (66.5%) of the education policy's provision of inclusiveness. The study concludes that inclusive education need be more proclaimed, given attention for implementation and teachers should be prepared to dispense harmonious tools for the benefit of all pupils including the challenged children for the suitable learning environment to prevail.

Yuhua Bu
East China Normal University, China

What Should China Learn from the World? – Based on Reflection on China-Canada Reciprocal Learning Project

This paper explores what Chinese school should learn from the world in dialogue with others in the era of globalization and informationization. Shanghai Huaping primary school and Toronto Ryerson community school have connected as sister school of cross-cultural exchange since 2008, and have been trying to explore an effective practical way towards cross-cultural reciprocal learning while grounding on native land. This research keeps eyes on sister schools' 10 years reciprocal learning experience and stories, and mainly explores what Huaping primary school has learned, has not learned, and should have learned from its sister school. In this process, the deep-rooted cultural differences, which influence reciprocal learning, will be expounded and interpreted. Narrative inquiry into principals', teachers', students', parents', and research assistances (graduate student in ECNU and OISE)'s stories will be burrowed, broadened, storied and restoried combined with all participants' reflection.

Concurrent 1C: Classroom Interaction & Technology

分组会议 1C: 课堂互动与技术

Mirco Stella, Konstantina Peristeris
York University, Canada

Resisting Collaboration as Tool Towards Collaboration as Opening

Collaboration represents a center piece of our public and democratic schools of the future (freedom to act collectively and in plurality in the public sphere both nationally and internationally). However, to transcend the vacuous and mainly theoretical discourses on collaboration, experiential and direct knowledge of collaboration is required.

Overall, we understand collaboration to be neither a static event nor a formalized route, but an ongoing dynamic process, a practice of method, "simultaneously tool and result" (Vygotsky, 1978 in Newman & Holzman, 1997) which relies on dialogue, reciprocity and diversity as empowering. As collaborators share their own experiences, differences and interconnections emerge, opening new ways of looking at familiar situations, challenging commonly held perceptions and stimulating change in each other. Through practices of collaboration, what is problematic sheds light on power dynamics and becomes the impetus for future learning and the development of new theory.

As PhD students who are working on a co-authored dissertation at York University, we are looking to analyse discourses of collaboration at the pre-service teacher level, specifically in pre-service teacher education programs - namely York University's BEd. Specifically, we will be constructing and conducting a survey within the program to collect information on the discourses

and perceptions of collaboration in connection with biographical elements of teacher candidates - including age and previous experiences which they perceive as collaborative. This inquiry seeks to establish whether there are particular elements - historical, technical/technological, sociological, economic - which appear to impact the views/perspectives pre-service teachers hold on collaboration - both in principle and practice- and whether they are being challenged/troubled/impacted through the program.

The survey will respond to questions such as: how is collaboration perceived and/or viewed by pre-service teachers? Is it a process they would be willing to engage in? How do they see themselves engaging in it? With whom? How do they perceive it as impacting their professional development and classroom pedagogy? How do they perceive the role of collaboration in learning and teaching? Do they value it as a form of division of labour or as an open-ended journey towards new possibilities and learning?

Yuanyuan Zhu

East China Normal University, China

Teacher-Student Interaction from the Perspective of International Education Reciprocity: Cultural Differences and Changes in Cognition and Behavior

This paper mainly discusses the cultural differences in the communication between teachers and students of China and Canada and the influence of reciprocal learning on teachers of both sides. For this purpose, we will use narrative inquiry method, mainly analyze china-canada teachers in classroom teaching, sino-canadian communication events and in the face of special children, etc, focusing on how teachers get along with students, what are the cultural differences reflected in communication, what do teachers think of the cultural differences in the communication between teachers and students, whether mutual learning brings new changes in cognition and behaviour. Based on this, this paper will further analyze the deep causes of cultural differences between teachers and students in the communication between China and Canada, make reflections on the process of reciprocity, and put forward corresponding suggestions to promote the sustainable development of reciprocal learning.

Xiaoyan Zhong, Zhicheng Cai

Southwest University, China

A Comparative Study on the Teaching Application of Information Technology from Perspective of Reciprocal Teaching and Learning — Based on the Case Study of RLTESECC Program

With the progress of information technology and educational informatization development, the integration of information technology into curriculum has become an important topic for educators. In order to understand information technology usage in the aspects of Teaching Preparation, Teaching Implementation, Teaching Evaluation, Home-school Communication and Class and Campus Management, we selected two schools that are involved in the reciprocal learning in Teacher Education and School Education between Canada and China Program as research sites. Based on the findings from observation field notes and interview data collected from teachers (and students), we discuss the benefits the information technology application provides in the above-mentioned five aspects. In order to provide some suggestions for the development of educational informatization in China and Canada, we also provide another case school who has accumulated abundant experiences in this area, and recommendations are offered for schools' application of ICT in Canada, China and beyond.

Shuai Fu, Liyang Fan

Beijing Foreign Studies University, China

Exploring the Dialogic Space in Classroom Teaching: A Case Study of Teacher Talk of an Experienced Chinese Music Teacher

Teacher talk has never been neglected in classroom learning research, and how teachers talk indeed motivates/hinders students' learning to some extent. This article is inspired by a series of music class observations conducted in an elementary school in Beijing and touches upon the unique in-class talking style of the teacher Ms. Dee and how her ways of talking affects students in achieving lesson objectives. Both Chinese and Canadian empirical studies regarding music teachers' classroom discourse were briefed in the literature review. The research applies sociocultural perspectives as the framework and articulates the teacher talk itself and the functions behind it by discourse analysis. In addition to the class observations, five informal interviews with Ms. Dee were done after class as a supplemental source to the analysis. Findings show that the sarcastic-while-inspiring talking style represents Ms. Dee's teaching identity in managing the class and her ways of talking prove

to be effective in that particular class which as a whole is in sharp contrast to other classes in discipline and collectivity. Implications are made to teachers in their teacher talking skills and awareness of individualized lesson planning.

Meng Wang

Jiangnan University, China

Using Sketch Engine for Language Learning among Chinese Beginners in the Canada-China Reciprocal Learning Program

As the Reciprocal Learning Program (RLP) progresses more and more Canadian teacher candidates have participated in the onsite exchanges through the program. Canadian teacher candidates visit Southwest University to attend a series of lectures and workshops on Chinese educational philosophy, education system, school system and culture, observe in local Chinese schools, and participate in cultural activities and fieldtrips. As a result, teaching them commonly used Chinese words from the perspective of non-native Chinese learners has become a necessary concern in our program. As a leading corpus tool, Sketch Engine has been widely used for language learning. In this paper, we first briefly describe the core functions of Sketch Engine. We then explore the different kinds of ways of bring Sketch Engine into Chinese language learning practice in our RLP. This corpus-based method can not only embrace learners' better understanding about the commonly used words, but also built up their capability of choosing a suitable word in different contexts.

Concurrent 1D: The Impacts of Canada-China Reciprocal Learning Program on Graduate Students & Researchers

分组会议 1D: 中加互惠学习项目对研究生和研究员的影响

Luxin Yang, Huimin Qin

Beijing Foreign Studies University, China

Reciprocal Learning: A Researcher's Narrative

Taking narrative inquiry as the theoretical framework and research approach, this paper examined a researcher's experience in her engagement in the Canada-China Reciprocal Learning in Teacher Education and School Education Partnership Grant Project. Over the past six years the researcher made effort to establish sister schools between Beijing, Toronto and Windsor with the assistance of her graduate students. This was a collaborative "relational inquiry" (Clandinin & Connelly, 2000) in which the researcher as the inquirer thought narratively about the experience and also learned from having been in the midst of the experience. Gradually, she came to understand the essence of reciprocal learning. That is, the reciprocity in the practice of reciprocal learning is not only about the process of intercultural communication, collaboration, and exchange but also about reciprocal growth and life development for those participating teachers, students and researchers. The participants' reciprocal learning is not only about learning from the others but also about looking for the common ground while respecting and maintaining differences. The most important outcome is the enhancement of participants' self-awareness and self-development during the process of reciprocal learning. She also observed the challenges and difficulties in establishing and maintaining reciprocal learning as collaborative partnership among international professional partners primarily because of cultural differences and the lack of intrinsic motivation or availability of teachers, which might be partially related to the support level and/or obstacles that teachers have in schools and districts. Furthermore, participating in the project gave the researcher the benefit of re-understanding and re-appraising her research and educational practices through a broader educational lens instead of language education, the focus of her doctoral education. As she moved back and forth between language education and general education and through an East-West reciprocal learning journey, the researcher became more culturally and disciplinary sensitive and more reflective of her own cultural traditions and educational practices. This suggests the necessity to develop a global, cross-cultural, and cross-disciplinary dimension in graduate studies and teacher education and development. The researcher's "lived stories" (Connelly & Clandinin, 1990, p. 6) also indicate that the personal, pedagogical, and social influences of cross-cultural and cross-disciplinary experiences play important roles in the professional development of teachers, teacher educators and researchers.

Luxia Liu

East China Normal University, China

Voices of the Assistants: A Narrative Inquiry of Graduate Assistants' Cross-Cultural Learning, Developing and Reflecting through Reciprocal Learning

Against the background of globalization, intercultural communication has become more and more important. (Kurosh & Kuhi, 2018). The reciprocal learning project, which mainly aims at promoting the development of teachers and students from China and Canada, as well as facilitating the intercultural communication between them (Tan, 2017), also involves experts and graduate or doctoral assistants. Although often out of the spotlight and seldom studied, the assistants have played a role in the project and have their voices. For one thing, they are the objective medium between the two sides, bridging teachers and students from different countries by direct observation, field notes, communicative translation and various meetings. For another, the assistants are subjective participants in the project as they have their own particular judgements and feelings and also benefit from the reciprocal learning process in terms of intercultural communication and many other aspects. Being both subjective and objective, in and out of the project, the role of "assistants" provides with us a different angle for looking into the process of intercultural reciprocal learning, which also deserves careful investigation. Therefore, the paper will focus on the assistants to reveal their thoughts and reflections during the reciprocal learning process. Narrative inquiry mainly via interview will be adopted to portray the voices of some Chinese assistants and their relations with other members in the project. Moreover, further analysis will be conducted to understand the role and characteristics of the assistants according to their dual function, thus providing potential suggestions for future assistants and materials for further investigation in order to improve the intercultural reciprocal learning between different schools.

Lijuan Jiang, Yibing Liu

Southwest University, China

From Project Participants to Reflective Practitioners: Changes of Chinese Exchange Teacher Candidates' Reflective Abilities Brought out by RLTESECC Project

Traditional research on "reciprocal learning" mainly focuses on "knowledge sharing", "skill acquisition", and "cultural understanding and respect", and pays less attention to the "self-awareness" of participants in cross-cultural reciprocal learning. It is rare to discuss how to arouse the "self-awareness" of project participants from the cultural perspective, so as to promote them to grow into reflective practitioners with professional consciousness. In this study, 8 graduate assistants from 4 research teams of Southwest University of China who participated in the project, Reciprocal Learning in Teacher Education and School Education between Canada and China (RLTESECC), were selected as case studies. The method of combining descriptive case analysis with explanatory case analysis was used to study these Chinese graduate assistants. Field texts were collected through graduate assistants' classroom observation, reflective journals, debriefing notes, and skype meeting minutes. Through questionnaire and in-depth interview, this study aims to explore the experience and reflection of graduate project assistants based on the teachers' change model and teachers' reflection ALACT model proposed by Korthagen (2004). This study tries to discuss the internal and external factors that caused the changes of reflective abilities of graduate assistants and puts forward effective strategies that can arouse the self-awareness of participants of reciprocal learning project. And the findings suggest that Chinese graduate assistants' reflective abilities have been effectively enhanced during their participation in the China-Canada reciprocal learning project, and changes of reflective abilities mainly reflected in four aspects: self-awareness, self-identity, teaching reflection and cross-cultural understanding. Graduate assistants who involved in the cross-cultural reciprocal learning project are more willing to accept new learning concepts, such as cooperative learning and inquiry learning; more willing to adopt action-oriented research methods; and more willing to realize that reflection is an effective way to promote the professional growth of postgraduates.

Na Wu, Yibing Liu

Southwest University, China

Research on Changes of Reflective Practice of Chinese Exchange Teacher Candidates in a Cross-cultural Reciprocal Learning Project

The research focuses on changes of the reflective practice of more than 200 Chinese exchange teacher candidates who participated in an international teacher education program, "Reciprocal Learning in Teacher Education and School Education between Canada and China" from 2012 to 2018, with the purpose of probing the significance of cross-cultural reciprocal learning programs to teacher candidates' reflective practice and professional competence. A qualitative approach was applied in this research; researchers collected and did textual and content analysis of reflective journals written by these exchange

teacher candidates and made semi-structure with some of them in order to find out changes in their reflective sense and motivation, reflective process, reflective contents and reflective strategies. Factors initiating these changes are also discussed with the purpose of promoting teacher candidates' reflective practice competence and improving cross-cultural teacher education reciprocal learning programs. The findings of the research suggest that the reciprocal learning experience guided by narrative inquiry methodology (Connelly, M. F. & Xu, S. J., 2008) has positive influence on exchange teacher candidates' reflective practice competence, which not only strengthens teacher candidates' reflective sense and motivation, but also makes teacher candidates more aware of pre-teaching reflection, after-teaching practice improvement, reflections on students learning, and the importance of reflective theories and strategies. The reflective strategies and methods of exchange teacher candidates become more professional and scientific, and even will bring changes in school reflective cultures after exchange teacher candidates become backbone teachers in their employment. It is also found that effective guidance of teacher educators plays a great role in teacher candidates' reflective competence development, reflective writing can make teacher candidates' reflective thoughts be explicit and practical, and teacher candidates' established reflective practice in the reciprocal learning period could be promoted or hindered by the school reflective culture after they are employed.

Yuanli Chen

University of Alberta, Canada

China-Canada Teacher Collaboration Programs: One-way Learning or Reciprocal Learning?

With the strategic partnership between China and Canada developing quickly, it is hopeful that the collaboration within teacher education has a bright future. However, there has long been a belief that China-West teacher collaboration is facilitating the flow of knowledge from the West to China.

This paper questions the above belief, and it argues for the significance of viewing reciprocal learning as a goal in teacher collaboration programs between China and Canada. Here, teacher collaboration programs include but are not limited to school/university/institution visits, classroom observations, material exchanges, research collaboration, joint curriculum development, staff meetings and informal conversations in either China or Canada. In addition, reciprocal learning (Connelly & Xu, 2015; Xu & Connelly, 2017; Huang, 2016) refers to the mutual respect, mutual learning and two-way learning outcomes of cross-cultural collaboration between the two countries.

In this paper, I refute the argument that one-way, westernized learning is the inevitable outcome of the current East-West teacher collaboration programs. The China-Canada teacher collaboration programs can foster reciprocal learning that benefits both sides. Specifically, I explore reciprocal learning outcomes as follows: first, the programs foster teachers' reflection on their own personal practical knowledge (Connelly & Clandinin, 1988); second, the programs foster teachers' inquiry into the values of the educational traditions and cultural heritage of both sides; and third, the programs foster teachers' commitment to global citizenship education. Finally, the paper concludes with the significance of the recommendation for reciprocal learning, and it directs attention to future work.

Concurrent Session 2: 并行会议二

Mechanisms and Modes for Reciprocal Learning in School Development

学校发展中互惠学习的机制与模式

Concurrent 2A: Reciprocal Learning through Collaborative Partnership

分组会议 2A: 合作伙伴关系中的互惠学习

Susan Holloway, Shijing Xu, Simin Ma

University of Windsor, Canada

A Narrative Inquiry: Exploring Reciprocal Learning through Face-to-Face Conversations between Chinese and Canadian Teacher Candidates

New teachers are likely to help shape the curricula of future elementary and high school students. If given opportunities in their own education to consider the importance of globalization and internationalization, then they are more likely to incorporate content, ideas, and skill sets that contextualize and actively explore how and why their teaching philosophies and practices will be shaped in certain ways.

In this research study over the span of two years (2016-2017) as part of the SSHRC Partnership Grant Project, we brought together two cohorts of Canadian and Chinese teacher candidates to discuss in person their thoughts and feelings about teaching. Face-to-face conversations allowed for very personable exchanges. In addition, teacher candidates were asked to bring in personal or educational multimodal artifacts that they felt represented some aspect of their teacher identity. They were also given the opportunity to express and reflect upon their experiences in writing. These sessions were followed up with individual interviews and focus groups with those teacher candidates interested in participating. Using a narrative inquiry and multiliteracies approach, the study revealed many similar aspirations amongst all teacher candidates as well as sometimes distinct and unique perspectives on education that seemed to be socially and culturally situated. Overall, participants commented on how their involvement in this research gave them new insights into diverse ways to think through their own pedagogical perspectives.

The world right now is full of tensions as we move forward trying to find common ground and ways to converse respectfully and openly about deeper issues. Surely educators must play a key role in helping to shape that dialogue and the future. This research study hopes to contribute to fostering important east-west dialogues amongst future educators.

Chenkai Chi, Shijing Xu

University of Windsor, Canada

Reciprocal Learning as Collaborative Partnership: Cross-Cultural Onsite Co-planning and Co-teaching

Adopting Xu and Connelly's "reciprocal learning as collaborative partnership", we explore whether and what reciprocal learning may take place between a Canadian teacher and a Chinese primary teacher when they are brought together to co-plan and co-teach at a Canadian school through a Canada-China sister school network. We also examine our roles as researchers in this reciprocal learning process when we help facilitate the communications between the Chinese and Canadian teachers. Our data have been collected from the participant observation with some follow-up communications through emails, WeChat and face-to-face conversations. Our study reveals that we cannot take for granted that reciprocal learning will take place as long as we bring together teachers of different educational systems. The different educational beliefs and pedagogical approaches encountered by two teachers reflected the differences between education generalists and specialists in the two educational systems, which require deeper narrative inquiry into the historical, social and cultural aspects of education. Our preliminary inquiry offers some insights into further inquiry into the historical, social and cultural aspects of education when it comes to international and comparative education and reveals the importance of reciprocal learning as collaborative partnership.

Ying Chen, Douglas McDougall, Angel Chor, Chunmei Zheng

Ontario Institute for Studies in Education, University of Toronto; George Harvey Collegiate Institute, Toronto, Canada; Taiping Middle School, China

Teacher Collaboration on Critical Thinking Tasks in Mathematics Classrooms: Teacher Learning in a Canada-China Partnership Project

This study is situated in a continuing Canada-China Reciprocal Learning Project which paired teachers from Canada and China over a period of two years for the purpose of improving teaching and learning. It specifically focuses on a pair of Math teachers, one from a Toronto District High School, and a middle school Math teacher from Chengdu, China. Through the partnership, teachers built relationships and stayed connected through in-person meetings, school visits, and online chatting. From the beginning of their partnership in summer 2016, teachers decided to work collaboratively on the development and assessment of students' critical thinking skills in their Mathematics classrooms. Centering on the topics of critical thinking, teachers (1) renegotiated the definition of critical thinking in Mathematics learning, (2) exchanged their knowledge and experiences of teaching critical thinking in Mathematics classrooms, (3) debated on their understandings and teaching techniques of the subject of Mathematics using critical thinking tasks, and (4) conducted research studies relevant to their collaborative practices regarding critical thinking in Mathematics teaching. Through the exchanges of teaching critical thinking tasks in classrooms, teachers reconstructed their knowledge of classroom learning in the other country in terms of school cultures, students, and curricular. This study examines the specific ways and resources that teachers applied in the process of learning. It aims to show the learning experiences that teachers collaborate in the partnership. To that end, to reveal how such experiences of learning in collaboration improve their teaching and learning in general, and what specific changes that both teachers experienced in the process of and as a result of learning. Data is collected from a variety of resources, including teacher interviews, teacher reflections, and documentations of teaching tasks, student work, and student interviews.

Xiaohong Li, Qiang Li

Nanning Normal University, China

The Influence of Cultural Differences on the Cross-Cultural Professional Learning Community between China and Canada

Cultural differences directly affect the effect of Cross-cultural Communication. There is increasing awareness of the need for cultural tailoring of intervention programs to maximise effectiveness of cross-cultural collaboration. This article reports the influence of culture difference on the establishment and the communication of (a) cross-cultural professional learning community composed of Sister Schools between China and Canada under the support of the Canada-China Partnership Grant Project. Narrative inquiry as a method, two sister teachers and four researchers were involved in a collaborative and reciprocal learning community. The study showed how those people overcame the negative effects of cultural differences and actively and effectively carrying out cross-cultural exchanges can enhance the sensitivity of people to different cultural heritage and cultural backgrounds, so as to better understand their own cultural identity. It showed how those people enhance the interaction between individuals and society and to make individuals more receptive to their own views while eliminate misunderstandings and mistrust. It created a framework for interpersonal communication that is tolerant, receptive, and transformative and trusting, which helps people to pay more attention to the new angle of different cultures, new ideas and unique wisdom, thus improving the effect of cross-cultural professional learning community, and then promoting and enriching human civilization.

Concurrent 2B: Enhancing Mathematics Pedagogies

分组会议 2B:加强数学教学法

Yuhang Zheng, Aihui Peng, Bo Yu

Southwest University, China

A Comparative Study of the Difficulty Level of Mathematics Textbooks Exercises in Equation between China and Canada

The difficulty level is an important indicator to evaluate the quality of textbooks and to measure whether textbooks bring heavy academic burden to students as well as significant for implementation of curriculum reform (Cai, 2013). As part of a larger seven-year Reciprocal Learning Partnership Project between China and Canada (Xu & Connelly, 2014), this study aims to

compare the difficulty level of mathematics textbooks exercises in Equation, an important knowledge point connecting elementary school arithmetic with middle school algebra.

The textbook "Math Make Sense" (MMS) based on Ontario Mathematics Curriculum by Pearson from Canada and the representative and authoritative textbook published by People's Education Publishing Press (PEP Edition) from China were selected for the study. According to the existing models of the difficulty level (Wang, 2015; Kuang, Yao & Cai, 2015), the difficulty level of textbook exercises in Equation is considered from two dimensions, cognitive requirement and exercise background. The cognitive requirement includes three sub-dimensions: imitation, application and exploration, and the exercise background concludes no background, living background and scientific background. The data was analyzed in three stages: Firstly, the number of exercises in Equation in Chinese and Canadian textbooks was counted; Secondly, the number of exercises in each dimension was counted; Finally, the difficulty level coefficient of Chinese and Canadian textbooks was calculated and compared.

Findings showed the difficulty level of exercises in Chinese textbooks is lower than that in Canada on the whole; Chinese textbooks focus on memorization and mastery of knowledge, while Canada on application and inquiry; The proportion of inquiry exercises in Canadian textbooks is higher than in China; The exercises in both textbooks pay attention to living background, but the Chinese reveals a stronger atmosphere of life.

This study has the following implications for textbook writing for both China and Canada: the Chinese textbooks could increase the difficulty level of exercises properly, and allocate the proportion of the exercises of imitation, application and exploration; For both China and Canada, the selection of exercises in textbooks could not only focus on the memorization and mastery of knowledge, but also on the application and exploration of knowledge; Chinese textbooks could properly increase the proportion of applying and exploring exercises; Canadian textbooks could pay more attention to the diversity of exercise background and increase the exercises with living background and scientific background.

Yanmei Wang, Xiaojie Gao

Jiefang Road Elementary School, China

Research on Organizing Strategies of Mathematics Classroom Teaching in Elementary Schools

With the rapid development of society, economy, science and technology, the application of Mathematics is more and more extensive, with a higher status and a bigger role. Also, the practice and history of mathematics education show that mathematics, as a kind of culture, has a tremendous impact on the improvement of people's overall quality. Therefore, it is particularly important to improve the quality of mathematics teaching in elementary education. In the spring breeze of curriculum reform, we have abandoned many bad habits of mathematics teaching in the past, such as "excessive practice", where students seldom have the opportunity to acquire knowledge and development through their own activities and practices. Students seldom have the opportunity to express their understanding and opinions. In mathematics teaching, we use advanced theories and educational ideas of experts to organize mathematics classes while learning the concept of curriculum reform. In practice, we find that to organize the study of mathematics, give full play to the function of mathematics, it is very necessary to carry out the guidance of learning methods.

Shuyuan Li, Aihui Peng, Bo Yu

Southwest University, China

A Cross-Cultural Analysis of Canadian and Chinese Mathematics Teachers' Questioning in Teaching Unit

Mathematics teacher's questioning in classroom play a key role in classroom teaching and have an important impact on students' mathematics learning. Meanwhile, mathematics teachers' questioning is a cultural practice, which is deeply rooted in their own educational culture. Cross-national studies in teachers' questioning provide unique opportunities for us to ascertain the strengths and weaknesses of educational systems and consequently provide information about how to improve the teaching and learning of mathematics (Cai, 2004). Under a larger seven-year Reciprocal Learning Partnership Project between China and Canada (Xu & Connelly, 2014), this study aims to compare Canadian and Chinese mathematics teachers' questioning in teaching Unit from a cultural perspective.

The data are two teaching video clips on teaching Unit price in grade four from both Canada and China, with each lasting for twenty minutes, taught by a Canadian teacher (generalist) teacher and a Chinese mathematics teacher. Teachers' questionings are examined from two dimensions, types and levels of cognitive demands. The types are examined by whether the question is a mathematical problem or non-mathematical problem. And the levels of cognitive demanding are divided into low or high cognitive demands which is based on Bloom's six Taxonomy of Educational Objectives, with Knowledge, Understanding, Application as low cognitive demands, Analysis, Synthesis and Evaluation as high cognitive demands.

Results show that the Chinese teacher raised much more questions than the Canadian teachers, with 56 questions from the Chinese teacher and 13 questions from the Canadian teacher. Furthermore, both Chinese and Canadian teachers paid attention

to reasonable proportion of both high and low cognitive demands questions, with 22 low cognitive demands questions and 6 high cognitive demands questions from the Chinese teacher, and 10 low cognitive demands questions and 2 high cognitive demands questions from the Canadian teacher. Thirdly, the Chinese teacher raised 17 non-mathematics questions but none from the Canadian teacher. The paper ends with explanations on the striking differences of Chinese and Canadian teachers' questioning from a cultural perspective.

Shu Xie, Yunpeng Ma, Cynthia Zhu, Douglas McDougall

Northeast Normal University, China; Ontario Institute for Studies in Education, University of Toronto, Canada

Primary Mathematics Teachers' Professional Noticing: Teaching Understanding through Reciprocal Learning Perspective between China and Canada

Noticing is a natural part of human sense making. Teachers, as professional group notice the teaching through their specialized eyes and purposes. Building on professional vision (Goodwin, 1994), disciplined perception (Stevens and Hall's, 1998) and intentional noticing (Mason's 2002), the professional practice of noticing has expanded in teacher education. There is quite a collection of contribution on teachers' noticing (Jacobs, Lamb, & Philipp, 2010; Kaiser, Busse, Hoth, König, & Blömeke, 2015; König et al., 2014; Sherin, Jacobs, & Philipp, 2011; Star & Strickland, 2008). This research on mathematics teachers' professional noticing which through reciprocal learning perspective between China and Canada, aimed to answer what was mathematics teachers' professional noticing in their own and the other country's classrooms, and how did teachers from China or Canada understand the teaching.

Data were collected through open ended interviews with seven people from each country (three researchers in mathematics education and four experienced teachers), totally 14 participants. The interviews with each participant were completed in three separate stages and were mainly about teachers' noticing in Mathematics classroom teaching and feedback based on watching the mathematics classroom teaching videos of two Chinese primary mathematics classes and two Canadian primary mathematics classes.

Teachers from two countries focus on teaching design, teaching process and teaching effect in mathematics classroom teaching. Moreover, different cohorts had different focus. This research found: (1)Chinese teachers focus on subject study and effect, Canadian teachers focus on entire learning and long-term development; (2)Chinese teachers focus on students' reflexive thinking, Canadian teachers focus on enlightenment and guidance of questions to students' thinking; (3)When Chinese teachers and Canadian teachers focus on specific teaching sessions, they emphasize differently; (4)Chinese teachers focus on basic teaching skills, Canadian teachers focus on teachers' literacy; (5)Canadian teachers focus more on technology integration and application in teaching, as well as curriculum integration; (6)Researchers' focus reflects unity and forefront, while teachers' focus is more specific; (7)Chinese and Canadian teachers both focus on the nature of mathematics.

The differences between Chinese and Canadian teachers' beliefs in teaching and learning resulted in different focus. They distinguished between what is noticed and how teachers interpret these events. Teachers' professional noticing could be helped to understand what would be identified within teaching situation, what kinds of knowledge they use to reason about the events, how they could make the connection between what they notice and the educational theory, in addition, what kinds of belief behind they notice. Therefore, developing intercultural educational resources sharing and cooperation from the perspective of reciprocal learning will be benefited to the teachers in this global village.

Concurrent 2C: Fostering Literacy and Cultural Identity among Language Learners

分组会议 2C: 培养语言学习者的文化认同与读写能力

Jiayang Shi

University of Windsor, Canada

How Chinese Immigrant Children with Limited Literacy Adapt to Ontario Curriculum in a Publicly Funded School

In this thesis, the literacy and numeracy of Chinese immigrant children (mainly from grades 3 to 5) will be observed and researched. Ontario's public schools are required to provide ESL classrooms for children who are LEP. In addition to the obstacles that these students face when acquiring academic knowledge with limited English literacy, they also struggle to adapt to the difficulties associated with Ontario's student-centered pedagogical models, which is difficult as many Chinese immigrant students have become accustomed to China's teacher-centered model. Besides, the expectation of Chinese parents and Ontario public might have differentiation.

Haojun Guo

Beijing Foreign Studies University, China

Exploring Chinese Primary School Students' Cognitive Needs of Translanguaging in EFL Classroom: A Case Study

This paper reports on a case study of 35 Chinese primary school students' expression needs of the flexible language practices in English classrooms where speaking their mother tongue is officially not endorsed. Data includes classroom observation, video recordings, field notes and interviews. The analysis has revealed that driven by the unknown and known information, the children naturally alternate between Chinese and English for two purposes: 1) to solve problems such as comprehending academic content and producing complete sentences in English; 2) to freely express themselves including describing ability/performance or instant situations and displaying their understanding of language knowledge. Identifying students' needs of translanguaging helps us to gain a better understanding of translanguaging practices from young learners' perspective and reexamine the English-only instruction policy in EFL classrooms and. The findings are expected to shed light on Chinese immigrant children's language learning in Canada and the comparison between language education in China and Canada.

Na Meng, Qingfeng Li, Hewen Zhang

Yunnan University, China; Université Paris, France; Confucius Institute in Quebec, Canada

CFL Learners' Cultural Identity in Chinese International Teaching

Should Chinese teaching focus on language teaching or cultural teaching? This is a question that language instructors and Chinese language teaching institutions have been keen to explore for a long time. Until the end of the 1990s, Office of Chinese Language Council International finally formed a standard: that is, teaching Chinese as a foreign language is mainly based on language teaching, supplemented by cultural teaching. Cultural elements are both important teaching content and indispensable teaching methods in Chinese teaching. This study takes Chinese as foreign language learners (CFL learners) from many countries in the world as a sample, adopts questionnaires and classroom experiments, and aims to investigate changes in students' cultural identity during the learning process. By understanding CFL learners' learning experiences, this study analyzes how to use appropriate teaching methods, teaching contents and cultural activities to promote students' understanding of Chinese cultural elements, and to better understand the cultural identity of students from all over the world. This study has been sponsored by Special Project of Confucius Institute Construction and Chinese International Promotion of Yunnan University. The purpose of this paper is to promote the education of Chinese as a foreign language and to promote cultural exchanges between China and the rest of the world by exploring the answers to the following questions:

1. How to teach and spread Chinese culture more effectively?
2. How to use Chinese cultural elements to improve CFL learners' enthusiasm for learning?
3. After learning Chinese and the culture, what changes have been made to CFL learners' cultural identity about China and their own countries?

In the context of globalization, we hope to create a new culture with "self-identity" of one nation's tradition as well as "commonness" of all human beings in order to construct a genuine cultural identity. We hope that this paper can help countries promote reciprocal communication, strengthen cross-cultural exchanges, and encourage further education cooperation in the future.

Charanjeet Batra

Ontario Tech University, Canada

Pedagogical Use of Native Language: Building a Reciprocal Collaborative Community Learning Space of Empowered Learners.

This paper discusses experiences and reflections from a mutual language learning research project. It was implemented at a post-secondary college in volunteer partnership with a university in Ontario, Canada. Research ethics board approved and applied research department of the institute funded it. Theoretically underpinned in Bandura's reciprocal determinism the project explored how native language learning could discursively construct an inclusive reciprocal language learning space. This research study examined how collaborative, cross-cultural, mutually empowered learning and co-creation of knowledge takes place. A technology-embedded (Adobe Connect) design used mixed methods techniques. In three consecutive semesters (winter, summer, fall) a first language survey from the student body identified most prominent non-English languages spoken. From respondents (n=4316) a case in point aimed to study three out of ten identified non-English languages (Mandarin, Punjabi, and Spanish). Four speakers from each of these selected minority language (n=12) were paired with four native Canadian English speakers (n=12) for each language, to teach each other their first language. The study aimed to investigate

how multilingual participants develop, and deliver instructional material. It explored interest levels of English speaking students in learning languages other than English from their peers. Quantitative and qualitative data were collected using six instruments: first language online survey, self-evaluation through participants' journal, reciprocal peer learning evaluation, observational logs, learners' module content evaluation by language experts and focus groups to carry out further specific investigations. This study has following implications: (a) identifies the concrete boosters of and barriers in using language as a tool to empower diverse learners; (b) enhances understanding about the needs of marginalized language learners in diversity growing Canadian post-secondary multilingual classroom; (c) answers how reciprocal learning could provide opportunities to trigger higher order thinking skills in both minority and majority language learners. This study fills a gap in the current collaborative English learning literature.

Arfang Dabo, Troy Mariage
Michigan State University, United States

4C: A Reciprocal and Collaborative Approach to Improve Reading Comprehension

The 4-C intervention, which stands for Connect, Collaborate, and Co-Construct, incorporates cognitive strategies within a dialogic approach to construct meaning with text before, during, and after reading. The intervention also teaches the use of social norms for effective collaborative learning, and for discussion (Dialogic learning, Nystrand, 2002; Accountable Talk, O'Connor & Michaels, 2007) with a multi-faceted cognitive strategy framework that focuses on pre-reading, during reading, and post-reading strategies.

Concurrent 2D: Cross-Cultural Professional Reciprocal Learning: Mechanisms & Experiences
分组会议 2D: 跨文化教师职业发展中的互惠学习：机制与经历

Emilia Iacobelli
University of Windsor, Canada

Cross-Cultural Experiences of Canadian Science Educators Visiting the Sister Schools in Chongqing China: A Cross-Cultural Experience

The benefit of cross-cultural learning is two-fold: first is the ability to recognize the practices and foundations that build education in another country and the second is beginning to understand the educational practices within one's home country. Cross-cultural learning also allows one to put the practice of education into perspective by having another side to compare to because "when researchers from two countries collaborate on research involving teaching and learning in two countries. Such research not only provides a researcher with understanding of science education in another country, but also sharpens insights into science education in his or her own country." (Aldridge & Fraser, 2000, p. 102). Using cross-cultural experiences as comparisons for pedagogical research can help in-service teachers to evaluate their own teaching philosophy. This research is a narrative, inquiry, case study of the experience and Canadian perspective of two in-service science teachers who visited sister schools in China. The case study will explore Canadian teachers' perceptions of teaching science, what inquiry-based teaching looks and sounds like, what equipment aids in the process, and what experiences and teaching methodologies can be shared between Canadian schools and the Sister Schools in Chongqing, China. When looking at China and Canada, there are foundational, curricular, and cultural differences that affect the ways teachers convey information and the way students are expected to learn. The aim of this study is to highlight connections between Canadian and Chinese teachers and teaching practices, in order to identify similarities and differences within the educational systems of the two countries, as well as the best practices that can be adopted from Chinese teaching into a traditional, mainstream Canadian classroom.

Min Liu, Jing Huang, Yishin Khoo
Jiangsu Second Normal University, China; Ontario Institute for Studies in Education, University of Toronto, Canada; University of Windsor, China

A Narrative Study of Canadian and Chinese Teachers' Personal Learning Journey through Cross-Cultural Educational Practice — A Case Study of Joint World Water Day Celebration

With the support of SSHRC Canada-China Reciprocal Learning Partnership Grant project, Bay Street School in Canada and its Sister School, Green Lotus School, in Shanghai have jointly developed the World Water Day(WWD) activity since 2014.

The purpose of this activity is to enhance students' understanding on water, raise their awareness on environmental protection and encourage sustainable practices for a better future.

In the past five years, Bay Street School and Green Lotus School have actively collaborated with each other to enrich their WWD activity. This year (2019) is the sixth year for the two schools to work together for their joint WWD celebration. As research assistants who have been working with Ann in Bay Street School and Shao, Liu in Green Lotus School to prepare for their joint WWD activity, we became interested in the impact of this joint WWD celebration on the personal learning journey of teachers themselves. The purpose of this study is therefore:

(1) To study the contents and forms of the joint WWD activity between Bay Street and Green Lotus School over the past five years

(2) To analyze the process and changes of this year's joint WWD celebration.

(3) To explore the personal learning and growth journey of teachers in Canada and China through cross-cultural educational practice with a focus on joint WWD celebration.

In our paper, we will use a narrative inquiry framework to study how teachers have experienced personal learning and growth through working with each other around their joint WWD celebration. Using class observation and interviews, we hope to explore new development in teachers' 2019 joint WWD celebration and the impact of this joint celebration on their personal learning and growth as educational practitioners.

In the end, we will systematically gather, analyse and represent teachers' stories as lived and told by them to shed light on relationship between individual experience and cultural context within a reciprocal learning partnership.

Jiaxin Huang, Shu Xie, Yunpeng Ma, Douglas McDougall

Northeast Normal University, China; Ontario Institute for Studies in Education, University of Toronto, Canada

"Difficulties" and "Roads" in Cross-cultural Reciprocal Learning: Teaching and Understanding of Chinese-Canadian Elementary School Mathematics Teacher W & L

With the acceleration of economic globalization, countries around the world have diversified in ways of exchange, cooperation and mutual learning. Reciprocal learning is a partnership model that interacts with and interacts with some of the daily activities of educators from different cultures and respects each other's personal practical knowledge (Michael Connelly, Shijing Xu, 2015). Achieving cross-cultural reciprocal learning requires learners to have a certain cross-cultural ability to ensure the effectiveness of reciprocal learning. In the trend of world education reform, education cooperation in the global context pays special attention to teachers' cross-cultural competence. This study is based on the "Reciprocal Learning Study of Teacher Education and School Education in Canada and China". Since 2014, through the methods of interviews, teaching observation, and cooperative teaching, this paper analyzes the mathematics between the reciprocal learning partners Chinese W teachers and Canadian L teacher, including teaching dialogue and communication. The aim is to answer: (a) Chinese-Canadian primary school mathematics teachers in the process of cultural differences in the process of cross-cultural reciprocity learning. (b) How different cultural backgrounds affect teachers' teaching and understanding. (c) The dilemma and path of teachers' cross-cultural and reciprocal learning. Through the analysis of the above three research questions, this paper explores the characteristics and causes of teachers' understanding in different reciprocal learning stages, and summarizes how teachers can achieve cross-cultural understanding and recognition in reciprocal learning, as well as trying to learn cross-cultural reciprocity for teachers. "Reciprocal learning" means that the gift relationship based on goodwill exchange is a process of mutual benefit and continuous sharing of experience, knowledge and wisdom. It is also an inevitable trend and attitude. Democracy and freedom, inheritance and creation, care and concern, cooperation and sharing, and common growth should be the basic characteristics of reciprocal learning.

Dr. Darcia Roache

University of Saskatchewan, Canada

Principals' Leadership Styles and Ability on Teachers' Performance in Selected Jamaican Primary Schools

The paper will discuss principals' leadership styles and ability on teachers' performance in selected primary schools. One issue uncovered was at times the principals lack the educational leadership ability to assist teachers' performance and enhance their motivation. This *laissez-faire* approach of the principal sometimes causes dilemma in the school system.

Problem Statement

The principal is the chief administrator for the institution. His responsibilities entail maintaining relationships with teachers and staff; managing classroom practices of teachers; and attend to the administrative functions of the educational institution (Alvoid & Black, 2014; Blank, 1987). Some teachers are not motivated to perform their duties as there is no guidance provided

by the principal (Smith, 1999). As a result, teachers' morale is low, and there exist numerous conflicts when trying to get things done. Evaluations for teachers are not done in a timely manner as the principal (i.e., the leader) may lack the leadership ability to control this dilemma – resulted in a chaotic reporting relationship between the teachers and the principal. The research will explore the effects of a principal's leadership ability and teachers' performance at a primary school in Jamaica.

Purpose Statement

This paper explores how the leadership ability of primary school principals in Jamaica influence teachers' motivation and performance. The study will produce a context mediated inventory of best practices that demonstrate promise to enhance teachers' motivation and performance. Further, this study will provide implications for principals' use of strategies that improve their leadership capacities related to teachers' performance. Aydin, Sarier, and Uysal, (2013) said principals' leadership style influences teachers' commitment to the institution and the job. When teachers are motivated their performance is also motivated, and so they will work better to achieve the goals of the institution (Briggs, Coleman & Morrison, 2012; Smith, 1999)

Primary Research Questions

Research Question 1: What are the commonly perceived effective leadership capacities and competencies exhibited by Jamaican primary principals?

Research Question 2: What performance outcomes that are directly and indirectly related to principal leadership are exhibited by teachers, according to perceptions of principals, teachers, and students?

Research Question 3: What are the leadership skills most appreciated by teachers with respect to their work collegially with the principal and other teachers to achieve the objectives of the institution?

Summary of the theoretical Framework

The study will use the transformational leadership theoretical framework as characterised by Bass and Avolio (1993) to identify factors of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration to assist principal's leadership ability and teachers' performance in selected Jamaican primary schools (Burns, 1978, Bass, 1996 & Bass, Jung, Avolio, & Berson, 2003).

Menghan Wu

University of Windsor, Canada

Student-teacher Relationship in Chinese Elementary School and Middle School and Canadian Elementary School

Education is an important part of modern society, and the student-teacher relationship is an important part of education. It not only impacts the success of students in school, but also influences the students' behavior, attitudes, and interactions with others. Both China and Canada governments attach great importance to education. However, the history, culture, and social situation are different in these two countries. Therefore, the education system and teaching style are different. All of them cause the different student-teacher relationship in the two countries. This paper will focus on the student-teacher relationship in elementary school in Canada, the JK-8, and elementary school and middle school in China, grade 1-9. Student-teacher relationship is the basic interpersonal relationship in schools. It is also one of the important social relationships in the process of children's socialization. It runs through the whole education and is directly related to the healthy growth of students. This research will base on the author's experience, the data from international students who are from China and study in Canada and the information form Reciprocal Learning Program. The purpose of the research is analyzing student-teacher relationship in China and Canada to find the advantages and disadvantages, and improve the student-teacher relationship in both countries.

Concurrent Session 3: 并行会议三

Research on Reciprocal Learning in Teaching & Teacher Education

教学与教师教育中的互惠学习

Concurrent 3A: Teachers' Personal Inquiries into Canadian & Chinese Education

分组会议 3A: 教师个人对中加教育的探究

Ding Ding, Luxia Liu

Huaping Primary School, China; East China Normal University, China

Collaborative Student Activities and Lesson Comparison: What I have Learnt from Reciprocal Learning

As a teacher from a suburban school in Shanghai, I have been working with my Canadian partner in SSHRC Canada-China Reciprocal Learning Partnership Grant project since 2015, which has exerted great influence on me. The paper aims to show my achievement and enlightenment from reciprocal learning with the help of my partner, and to analyze a co-teaching lesson to show our collaboration, our differences and similarities.

During the collaborative partnership, we have tried various ways to facilitate our collaboration and our students' learning, through activities like exchanging letters, exchanging information about Chinese and Canadian traditional festivals, and creating an Electronic Alphabet Book through joint effort. I will focus on how I carried out these activities and how my students improved from my perspective. For example, my students and I have continued the designing of a special Pictionary with the Canadian partner, and I will provide my working process during the collaboration, examples of my students' work and stories of my students. Observation, questionnaire and interview will also be used for gathering information.

Moreover, I will also make analysis of two typical lesson studies and our co-teaching lesson. One is the reading class of <The lion and the mouse> and the other is the story-telling class of <A boy and a wolf>. With the help of classroom record and field notes by graduate assistants, I will use comparative analysis to show the similarities and differences between Chinese and Western teaching methods. More importantly, I want to show what my students and I have gained from the reciprocal learning.

Chunmei Zheng, Ying Chen, Angel Chor

Taiping Middle School, China; Ontario Institute for Studies in Education, University of Toronto, Canada; George Harvey Collegiate Institute, Toronto

Designing Tasks for Assessing Critical Thinking: A Chinese Math Teacher's Experimental Research

This study is my experiments on designing tasks for assessing students' critical thinking. My interest of this topic is inspired by my participation in a Canada-China reciprocal learning project over the last two years. Learning in partnership with a Canadian teacher enriched my knowledge of critical thinking. While my Canadian partner gave an example of how she designed and taught a task to enhance students' critical thinking abilities, I also wanted to experiment on how to engage my students in such tasks in Math class. Because of the special culture and student backgrounds in Southwest China, students reacted differently to the task. The findings and discussions provide details on how I analyzed the task and suggestions I argued for appropriate tasks for the purpose of improving students' critical thinking in middle school.

Thanh Buu Tran

University of Windsor, Canada

Standardized Testing in the Chinese School System: A Canadian Student Teacher's Perspective

The goal with this research project is to explore in-depth about one strand of assessment tools that gives a tangible audit to education. Assessment is a key process in education as it is only through assessment that we can find out whether the instruction has had its intended effect, because even the best-designed instruction cannot be guaranteed to be an effective methodology toward teaching students. This assessment tool is standardized testing, which enables us to measure the performance of an educator's methods on whether not it is beneficial to the students. The earliest form of standardized testing was founded in China, where the imperial examinations covered the six strands of recognized art, which included music,

archery and horsemanship, arithmetic, writing, and knowledge of the ceremonies and rituals; the testing sections expanded with military strategies, civil law, revenue and taxation, agriculture, and geography. Standardized testing was then introduced to Europe in the early 19th century, following the Chinese model, and slowly made it around the world until this modern age. This study was accomplished during observation period in China as a guest within the Chinese classrooms. The Chinese teachers were observed in order to attain and compare the methodologies and practices that were used to prepare the students for the standardized tests, and whether these pedagogies could be beneficial to bring back into Canadian classrooms. The research project has been made possible by the partnership between Southwest University and the University of Windsor through the Reciprocal Learning Program (RLP) which was developed to learn about the different learning and education systems embedded with the two countries, which paves a scholarly link between Canada and China.

Zong Zong

Beijing Foreign Studies University, China

Exploring the Professional Growth of Teacher as Researcher: Case Study of an Experienced High School EFL Teacher in China

This paper focuses on the change and evolution of teaching research ability of an experienced EFL teacher through a 2-year, in-service teacher training program based on school-university partnership in Beijing, China. It draws on Sociocultural Theory of Mind as the theoretical framework. Vygotskian concepts, such as ZPD, perezhivanie and agency are used to identify the factors driving the participants' learning process. The ability of a teacher to conduct teaching research is gaining attention under the current educational policy of China. Conducting teaching research may also promote the development of pedagogical knowledge. Following this line, the present training programme is designed to improve the teaching ability as well as teaching research ability of the elected trainees. However, whether or not it should be viewed as expertise in the professional development of a teacher is still under discussion. Compared with teaching ability, teaching research ability is not a remarkable feature of typical experienced teacher in high school based on stereotype. Besides, action research is viewed, by many teachers, as a mysterious work full of riskiness, for it seems like a great hindrance to their regular job of teaching. In this case, the present study is designed to uncover the development of the focal participant's action research, what challenges she has experienced in shaping it, as well as the ways in which she handled these difficulties with the help of her two supervisors and other members in the community, including trainers and fellow trainees. Data are derived from the in-progress MA thesis of the researcher, which are collected longitudinally by semi-structured interviews around key events, with reflective journals of the participant and other supporting data analysed to triangulate the major findings. Hopefully, the mechanism of this particular in-service training program for the focal teacher's research abilities development would be revealed. The role of training programme in teachers' professional development would also be discussed based on a review of studies concerning in-service teacher training in both China and Canada.

Yuhan Deng

University of Windsor, Canada

A Narrative Inquiry of Canadian Pre-Service Teachers' Chinese Language Learning and Cross-Cultural Learning

This narrative study investigated the Canadian teacher candidates' Chinese language learning and their cross-cultural experiences in China related to participating in a three-month study-abroad program between a university in Canada and a university in China. I also seek to identify the various strategies that are effective and efficient for the pre-service teachers' Chinese acquisition. This research is contextualized in Dr. Shijing Xu's Reciprocal Learning Program between University of Windsor and Southwest University China and Xu and Connelly's (2013-2020) larger SSHRC Partnership Grant Project. The research questions of the study are: 1) What role does Chinese language proficiency play in the UW pre-service teacher candidates' reciprocal learning in China? 2) What are the pre-service teacher candidates' motivation, attitude, and strategies in learning the Chinese language before departure, and during their China visit? 3) While in China, what language acquisition strategies do the UW pre-service teacher candidates find most effective? 4) How do the UW pre-service teacher candidates learn about Chinese culture when immersed in a Chinese language environment? 5) What is the Chinese Survival language essential for them?

Narrative inquiry is the research methodology. This study focuses on four participants' Chinese as a foreign language learning, and the findings show that the teacher candidates have not only developed a higher language tolerance for the learners who are non-native speakers of English, but also developed a better pedagogical understanding with regard to how to teach English as a foreign language to non-native learners by learning Chinese and teaching in China. In addition, by studying and using Chinese in China, the teacher candidates have developed an appreciation for the different cultures, which can help them appreciate multi-cultural education while teaching in Canada.

Concurrent 3B: The Impacts of Canada-China Partnership on Pre-Service Teachers' Learning
分组会议 3B: 中加合作伙伴关系对职前教师的影响

Yining Fu, Darryl Hunter

Soochow University, China; University of Alberta, Canada

Ethical Beliefs and Deep Learning with Pre-Service Teachers in China and Canada

This paper describes initial findings from a three-year, joint research project that explores the ethical learning of pre-service teachers at the University of Alberta, Canada and Soochow University, People's Republic of China. The overall purpose of this project is to enhance the preparation of ethically-attuned teachers in both China and Canada by: 1) clarifying the salient dimensions of deep learning about ethical issues; 2) conducting causal-comparative research about culturally-appropriate formats for feedback; and 3) improving higher education instruction in both countries. Comparisons across countries aim to simultaneously improve ethical teaching and learning of pre-service teachers. In this paper, the results of the first year from the project are presented. Subjects were 71 University undergraduate students. Among them, 38 students were from the Ethical Theory Course at Soochow University and 33 students were from the Ethics and Law Course at University of Alberta. The scales of deep learning process and ethical beliefs were used to investigate undergraduates' ethical beliefs between Soochow University and University of Alberta, and student responses to deep learning on ethical matters. The results demonstrate Canadian students deemed their own careful reasoning and reflection, and for reliance on gut instinct, more highly than do their Chinese student counterparts. Conversely, the Chinese undergrads in Soochow University rated the influence of their university classes and the influence of law and policies in shaping their views more highly than do Canadian undergrads. Nonetheless, family influences on ethical reasoning are not significantly different between the students at these two universities. When it comes to the learning processes adopted in ethics classes, the Canadian and Chinese university students adopted very different approaches to learn about right and wrong conducts. The results have significant differences in surface learning motivation, surface learning strategies, deep learning motivation, and deep learning strategies.

Juan Shi, Pengcheng Zhao, Guangwei Feng

China West Normal University, China

On Inspecting Pre-service Teachers' Professional Changes from Cross-cultural Reciprocal Learning Experience: A Qualitative Study on the RLTESECC Project of Exchange Students between China and Canada

Nowadays, with the vigorous construction of destiny of mankind community in our country, the frequency and form of international educational exchanges are increasing, more and more pre-service teachers have participated and will participate in international cross-cultural learning. The study selected pre-service teachers from China and Canada who participated in the Project of "Reciprocal Learning in Teacher Education and School Education between Canada and China" (RLTESECC) as the research sample. The paper analyzed pre-service teachers changes of professional identity, professional ideals and beliefs, professional knowledge and professional competence through interviews, text analysis and other qualitative research methods. Finally, the paper comes to three conclusions. First, pre-learning experience is crucial factor in considering the influence of cross-cultural learning. Second, pre-service teachers changes shows the characteristics of comprehensiveness and persistence. Third, the intensity of teachers' change is related to teachers' self-professional awareness.

Bruce Tucker, Zuo Chen Zhang

University of Windsor, Canada

Experiences and Reflections: Voice of a Participant in the Reciprocal Learning Program

This paper reflects on the experience of a Chinese participant in the Student Exchange component of the Reciprocal Learning in Teacher Education and School Education between Canada and China research program, which is funded by the Social Sciences and Humanities Research Council of Canada (SSHRC). The project involves a number of participating universities and school boards in both countries. Since the launch of the program, about a dozen mutual visits between Southwest University in China and University of Windsor in Canada have taken place. Every year, one or two groups of around twenty teacher candidates from a broad range of disciplines at Southwest University come to the University of Windsor's Faculty of Education as visiting

students. They audit classes and visit local schools as part of the project's goal of allowing Canadian and Chinese participants to learn from each other.

This paper is based on the first author's extensive communication with one of the Chinese teacher candidates who visited Windsor in 2016. It analyzes her observations and experiences when she was visiting the schools in Canada and her reflections after she became a schoolteacher in China. The paper will follow the student/teacher as she navigates two different teacher education models, school education systems, pedagogies, and policies, examining her moments of both frustration and inspiration. We seek to understand more fully how novice teachers traverse cultural boundaries and try to develop more hybrid models of teaching and learning. By sharing these reflections, we hope to provoke discussion among audience members on what the reciprocal learning experience means for teacher educators, and pre-service and in-service teachers.

Dan Xiao, Jing Liang, Ran Cao, Yuqing Xiao, Ju Huang

Southwest University, China; High School Attached to Southwest University, China

Study on Cultural Awareness of Senior High School English Teachers under RLTESECC Project — A Case Study of the High School Affiliated to Southwest University

With the publication of the "National English Curriculum Standards for General High School (2017)", cultural awareness has become an important element of Core Competence in English. The cultivation of students' cultural awareness requires English teachers to possess both cross-cultural awareness and cross-cultural competence. In other words, English teachers are not only instructors of language knowledge, but also introducers of excellent culture. Nowadays, more and more English pre-service teachers participate in overseas programs. Exploring the current state of these teachers' cultural awareness after their induction helps to understand the impact of cross-cultural experience on their own cultural awareness and cultural teaching. However, a review of the relevant study suggests that the study on this issue is extremely limited in China. Therefore, this paper conducts a case study of a senior high school English teacher from the High School Affiliated to Southwest University who has been to University of Windsor in an overseas program, aiming to discuss the following two questions: 1) What are the embodiments of the teacher's own cultural awareness development after studying in Canada? 2) How does the teacher cultivate students' cultural awareness in actual teaching? The data are obtained through interviews, classroom observations, and document analysis, and investigations and analysis are conducted based on the six dimensions of cultural awareness proposed by Deming Mei and Qiang Wang (2018), which include cultural acquisition, cultural comparison, cultural exchange, cultural understanding and self-confidence, cultural values, and cultural transmission. The study finds that through the educational practice in Canada, the teacher paid more attention to cultural acquisition, cultural comparison, and cultural understanding and self-confidence than cultural exchange, cultural values, and cultural transmission, leading to lacking cultivation of students' cultural awareness at the latter three dimensions in actual teaching. The result provides some useful references for high school English teachers who have the opportunity to study abroad to pay full attention to the development of their own cultural awareness in each dimension and to cultivate students' cultural awareness in actual teaching.

Chunlei Liu

University of Windsor, Canada

Primary School's Library Education in Canada and China: A Comparative Analysis

Contextualized in the SSHRC project, Dr. Xu and I have experiences and reflections on reciprocal learning in school education, especially on library education. "The school library program promotes collaboration among members of the learning community and encourages learners to be independent, lifelong users and producers of ideas and information" (American Association of School Librarians, 2009, p 19). According to Luo (2002), the foundation of China's primary and secondary school libraries is considerably weak, and the requirements for implementing quality education are far away from north American qualified library education. However, the role and the responsibilities of library experts in the 21st century should to expand. Since the adoption of the "No Child Left Behind", North American education in many schools has declined or even been eliminated. The latest version of "Connecting Libraries and Classrooms: The Role of Media Experts" is designed to help school librarians work with teachers in the subject area to meet the needs of a particular student community and to fully understand the importance of library educational trends (Bishop, 2011). The purpose of this paper is to explore the role of school library and librarians in the modern K-12 curriculum both in China and Canada. This information is organized into reading, music and other courses; key trends in education, and inclusiveness. This resource is invaluable for practicing school librarians and is the core textbook for pre-service librarians. Our research questions are: 1) what is the function of school library both in China and Canada; 2) and what is the librarians' role in the modern K-12 curriculum both in China and Canada. The research methodology will focus on document analysis and combined with classroom observations and interviews. Based on the research findings, people will be able to find the difference of library education function both in China and Canada and know how to improve the library education in the future.

Concurrent 3C: Culturally Relevant & Sustaining Approaches to Teaching & Learning 分组会议 3C: 文化相关和可持续的教学

Dr. Anthony N. Ezeife

University of Windsor, Canada

Meaningful and Sustainable Mathematics Education for Students of Indigenous and Ethnic Minority Cultural Backgrounds in Canada and China: An International Reciprocal Learning Perspective

Disdain for mathematics and associated spheres of study is prevalent among several high school students, especially learners from Indigenous and ethnic minority cultural backgrounds. This disdain has predictably translated into mathematics phobia with its attendant malaise – low enrollment in mathematics-related fields, and poor performance in examinations – which have remained the unflattering state of affairs in high school education among these at-risk learners (Binda, 2001; Ezeife, 2011). In turn, this situation has led to high dropout rates of Indigenous/ethnic minority high school students in mathematics, science, and other technologically oriented fields (Friesen & Ezeife, 2009; Lauangrath & Vilaythong, 2010; amongst others). Many authors/researchers, knowledgeable Indigenous Elders, and other educators have called for a re-orientation in curriculum development programs, selection of mathematics teaching/learning contents, and an emphatic re-direction in classroom implementation procedures and practices – with a view to making mathematics teaching and learning meaningful, relevant, and inviting to learners from Indigenous and ethnic minority cultural backgrounds.

This paper has engaged in a rigorous, research-sourced discourse of the identified handicapping, debilitating and inhibiting factors often cited by Indigenous/ethnic minority students in schools. The paper also highlighted and addressed the several areas of variance between the dominant (mainstream) and Indigenous/ethnic minority cultures as they affect school learning in the two multicultural countries - Canada and China – which are involved in the SSHRC-funded Canada-China Reciprocal Learning Partnership Project (Xu & Connelly, 2016). Additionally, the paper harped on the urgent need to tackle the missing link (Doige, 2003) manifested in the lack of relevance (especially in mathematics and science fields) felt by Indigenous/ethnic minority students in mainstream school systems in these two countries. The study on which this paper is based was carried out in pursuit of one of the set goals (Cultural Perspectives) of the Mathematics Research Team - one of the four constituent teams in the Canada-China Reciprocal Learning Project.

Nesreen Elkord

University of Windsor, Canada

Cross-Cultural Schooling Experiences of Arab Newcomer Students in Canadian High Schools

While Arab-Canadians are not a recent addition to the Canadian mosaic, as historians report that the first Arab immigration wave dates back to late 1800s, the latest 25 years have witnessed a significant rise in Arab immigration rates to Canada. In this book, published in the Intercultural Reciprocal Learning in Chinese and Western Education Series, I present Arab immigrant youths' perspectives through life stories that reveal the various encounters and achievements they experience at school and at home in a Canadian educational context. The student stories bring to the forefront the complexity of Arab-Canadian youths' cross-cultural schooling experiences through exploring multifaceted areas such as home and school life; school climate; stereotypes; school relations; engagement and sense of belonging; and influences both in and out of school that encourage or hinder students' education, learning, and adjustment in Canadian society. The stories offer valuable insights for reciprocal learning among all stakeholders in Canadian schools through familiarizing school communities with these students' traditions, values, and living circumstances.

In the book, *Cross-Cultural Schooling Experiences of Arab Newcomer Students: A Journey in Transition Between the East and the West*, I highlight the tensions between Arab youths' home and school experiences in an effort to help build bridges and make high school less opaque to Arab immigrant students and their parents, all the while offering insights into multicultural education and useful resources for teacher education.

Dianne E. Stevens

York Region District School Board

Immigration: A Leap of Faith

This research examines immigration from the perspective of Grade 9 students of Asian ethnicity, many of whom are immigrants or the children of immigrants. It further details the teacher's reciprocal learning in this classroom exchange that deals with big questions: Do people immigrate by choice, by necessity or by force? What are the challenges? The blessings? Is it important -

even possible, to keep one's original culture in a new environment? My students' answers taught me a new perspective on what it means to be an immigrant.

As a younger, naïve, white Canadian woman, I believed that every immigrant who came to Canada enthusiastically embraced his/her good fortune. My first understanding of the complications developed when I became friends with adult Visa students while we worked on our doctorates at OISE/UT. Years later, the complexity of immigration became startlingly apparent when the late David Booth invited thirty teachers, me included, to be part of his current research. He was exploring the variety of ways teachers could work with a particular text, an Icelandic myth, *The Seal's Skin*, and the richness of students' responses this would generate. As the myth goes, a seal-woman, who had shed her seal skin to party on land, could not return to the sea when a man took and hid her seal skin. Although the two married, lived happily, and had seven children, the woman often gazed longingly at the sea. Metaphorically similar to the seal-woman, my students or their parents were transplanted from their birth culture to a new environment where they must adapt to survive. This research gave students the opportunity to authenticate their experiences through articulation, while simultaneously and reciprocally expanding their teacher's understanding of the nuances of the immigration process.

Xiangyu Li, Huan Li

National Changhua University of Education, China; Southwest University, China

Rural and Urban General Teachers' Instructional Strategies in Inclusive Classrooms in China

Under the influence of the dual economic structure, the quality of inclusive classes has significant differences between rural and urban general schools. This research explored the differences in the instructional strategies, teaching design, teacher's acceptance of special students, the support and barriers of inclusive classrooms between urban and rural general schools, and adopted qualitative study paradigm to carry on the survey of 16 inclusive education teachers in rural and urban in C city. NVivo was employed to data processing. Based on the findings, this study puts forward the following suggestions: (1) Improve the policy of promoting the balanced development of special education between urban and rural schools. (2) Speed up the transformation of special education school center functions in the context of inclusive education. (3) Combine the pre-career and post-career training to improve the quality of inclusive education teachers. (4) Mobilize social support to form a multi-support system. (5) Guide inclusive education teachers to actively use special education-related instructional strategies.

Concurrent 3D: Canada-China Reciprocal Learning Program: Impacts & Challenges

分组会议 3D: 中加互惠学习项目: 影响与挑战

Ying Chen, Douglas McDougall

Ontario Institute for Studies in Education, University of Toronto, Canada

Assessing the Post-Impact of Learning for Teachers in a Canada-China Partnership Project: A Case Study

This study is contextualized in a teacher learning project between Canada and China. The learning project paired teachers, normally one from each country, to be engaged in various learning activities over three school years. The longitudinal partnership allowed those teachers to build long-distance relationships and promoted cross-cultural dialogues that mainly constructed new knowledge of practices for Math learning and teaching. Totally, four teacher pairs started their partnership at different time points from the years of 2014 and 2015, and officially ended their project-funded collaboration by June 2018. In this study, we focus on one of the teacher groups, which has three teachers, two from China and one from Canada, who were paired between September 2015 to June 2018. It aims to explore how their collaboration of learning developed after the official partnership ended, and how their partnership experience continues to influence and impact them in their profession and personal lives. We used a survey and interview questions to collect data from the three teachers. In the survey, we asked a few core questions for teachers such as: Did you stay connected with your teacher partner since June 2018? If yes, for what reason(s) and how did you stay connected? If not, why not? Based on their responses to the survey, we conducted individual interviews to follow up with each teacher with further questions for clarification.

As project facilitators, we observed teachers' professional growth and changes throughout the three-year partnership. Before the partnership ended, teachers stated their hope and eagerness to continue their collaboration regardless of particular challenges. Unfortunately, initial findings showed reverse results against their original expectations-teachers rarely communicated with their partners afterwards. The obstacles and challenges to continue the learning momentum provided critical insights for teacher educators and project designers to reflect on enhancing the effectiveness and sustainability of teacher learning.

Zuochen Zhang, Pinge Ai

University of Windsor, Canada; Huanggang Normal University, China

Reciprocal Learning between Sister Schools: Challenges and Recommendations

The Reciprocal Learning in Teacher Education and School Education between Canada and China is a seven-year partnership research program funded by SSHRC (Social Sciences and Humanities Research Council) of Canada, and it is participated by universities and school boards from Canada and China. Since the launch of the program in 2013, a number of projects have been developed as venues for reciprocal learning. The sister school project was set up to create opportunities for Chinese and Canadian schools to learn from each other through online and face-to-face activities including lesson sharing, guest teaching, collaborative lesson planning, and video conferencing discussions, and mutual visits. The authors of this paper have been involved in a variety of activities carried out by some pairs of sister schools as researcher and research assistant, and the aim of this paper is to share the authors' experiences and observations regarding certain aspects of collaboration between pairs, such as 1) ways of communication, 2) language barrier, and 3) mutual visits by administrators and teachers. In terms of communication, a variety of communication methods were explored and different tools, e.g., Skype audio and video calls, WeChat, email, and cell phone were used because it is noticed that no single type of technology is always reliable due to various factors. Regarding language barrier, even though there are bilingual staff members and graduate students assisting the communication between Chinese and English speakers, miscommunication happens from time to time. Visits to each other's site proved to be a very useful way to enhance and sustain the reciprocal learning between the involved schools, but challenges do exist for organizers and visitors themselves. A few recommendations are offered with the hope to improve the reciprocal learning in the sister school project.

Cynthia Sijia Zhu, Douglas McDougall

Ontario Institute for Studies in Education, University of Toronto, Canada

Strategies for Building Successful Reciprocal Learning Relationships

Using narrative inquiry this research follows two pairs of teachers from Canada and China as they engage in reciprocal learning over the course of three years. Cross-cultural reciprocal learning partnerships (RLPs) aim to provide a laboratory for teachers from Canada and China to have direct contact (Xu & Connelly, 2013). This 'laboratory' is co-constructed by the teacher participants in the RLPs but also by their administrators, facilitators, and researchers. While each reciprocal learning partnership creates a different laboratory dependent on their needs when learning from and with each other, some patterns have emerged from the two cases within this study. Specifically, this paper analysis the development of their relationship in terms of time and experiences. The patterns that are emergent can be viewed in two main ways: how a RLP develops over time and the types of interactions necessary for a successful RLP. Findings suggest that RLPs are developed through three main temporal stages where teachers learn about each other, learn from each other, and then learn with each other. Within each of these stages the RLPs must engage in three types of experiences in order to develop their relationship. These types of experiences include content, planning and social driven interactions which is consistent with Haythornthwaite's (2002) model for building relationships for collaboration. When successful, RLPs provide an environment for teachers to learn from one another. By developing RLPs through the stages outlined in the research, teachers are able to develop trust and knowledge of their partner and facilitator, teachers are able to engage in consistent and iterative self-reflection and comparison to identify areas of strength, growth and the gaps in their knowledge. The results from this study are beneficial to future collaborative professional development efforts for teachers but can also extend to reciprocal learning within other organizations.

Ruxandra Nahaiciuc, Geri Salinitri, Yuanrong Li, Mackenzie Tourigny-Conroy

University of Windsor, Canada; Southwest University, China

Bridges and Barriers: Observations of the Challenges and Insights Gained from the Collaboration Between the Canada and China Secondary Science Team

One of the main research goals of the Canada-China Reciprocal Learning Program (RLP) is to build knowledge and understanding from a cross-cultural perspective (Xu & Connelly, 2008; Xu, 2011). The metaphor often used for the vision of the program is building a bridge of understanding between the two participant countries (Howe & Xu, 2013) in order to benefit both sides in the diverse fields of education, multiculturalism, English Language Learning, and curriculum development. The purpose of this study is to explore the University of Windsor, Secondary Science Group's lived experiences and perceptions of the bridge they have helped build through extensive Canada-China Pre-Service exchanges, In-Service teacher interactions, and program development. The current study analyzes compiled focus group interviews of Pre-Service Chinese teachers observing Canadian classrooms, Skype conversation minutes over the course of three years, and conference observations regarding the

Science team's presentations attending the 2018 Canada-China RLP Conference in Changchun. The observations and the lived experiences surrounding the Secondary Science team in Canada revealed unique queries about the bridge they have helped build and created a space for critical reflection regarding some barriers that were experienced as part of the collaboration. Insights pertaining to collaborative, international work point to barriers pertaining to the differences in teaching realities, the time zone incongruity, and the language barrier specific to Science terminology. To gain further insight, the study suggests including potential discovered barriers from all RLP groups to be collected and analyzed for the continual strengthening of the bridge between Canadian and Chinese researchers and pedagogues.

Sirous Tabrizi

University of Windsor, Canada

Reflection on Equity, Adequacy, and Excellence in Education for Supporting the UN's Sustainable Development

The United Nations has outlined several goals for improving education that countries should reach by 2030. One of these - Sustainable Development Goal 4 - focuses on providing access to high-quality education at all levels (pre-school, primary, secondary, tertiary) regardless of potential barriers (disability, prejudice, etc.) (United Nations, 2015). This paper provides some reflections on how equity, adequacy, and excellence in public education systems contribute towards accomplishing Sustainable Development Goal 4. Equity refers to being fair and impartial (Radwanski, 1986), typically applied to education as creating fairness and inclusion. Fairness, in which there are no obstacles to achieving one's potential, tends to be difficult for OECD countries due to wealth differences (Bradshaw, Hoelscher, & Richardson, 2007) and is connected to the UN goal in terms of resolving potential barriers to education. Inclusion refers to providing a basic minimum of education (Zhang, Chan & Boyle, 2014), which is a measurable outcome (e.g., literacy, numeracy) for the UN goal. Excellence refers to both the standards of performance and reduction of dropout rate, as realized through curriculum, teachers, and students (Radwanski, 1986). Curriculum, standards, and teachers tend to be the focus for much research on achieving excellence, but students' effort and barriers (such as due to social, emotional, or family issues) pose much greater challenges. Measurable outcomes of excellence are often connected to adequacy, which measure the minimum acceptable level. Although the UN goal pushes for excellence, adequacy is the necessary first step. The sustainable development goals are a challenge for all countries, not simply Canada, and any solutions to the excellence - adequacy debate may vary depending on a country's circumstance and which aspects of Development Goal 4 need to be addressed.

Concurrent Session 4: 并行会议四

Diversity and Reciprocal Learning Relationships: Practice and Theory

多元化与互惠学习的关系：实践与理论

Concurrent 4A: Education and Cultural Diversity in South-Western China

分组会议 4A: 中国西南部的教育和文化多样性

Tian Xiao, Jinsong Li, Shuhan Yang

Yunnan Normal University, China

Spatial and Temporal Variation of Resource Allocation Efficiency of Secondary Vocational Education in Yunnan Province—Based on the Panel Data of 16 Cities and Prefectures from 2014-2018

The 13th Five-year Plan on Poverty Alleviation Based on Education and Implementation Scheme on Poverty Alleviation of Extreme Poverty-Stricken Area Based on Education (2018-2020) all mention new-type skilled farmers having cultural literacy, knowing technology and able to conduct management should be cultivated, which is also the specific requirement of “rural revitalization” strategy. The flexibility and diversification of informal education can rapidly make up for the insufficiency of members in technology and capability within short time, timely adapt to the industrial structure adjustment and economic development demand, and rapidly enhance human resource quality in the strategy of poverty alleviation and rural revitalization, the powerful adaptability and timeliness of which cannot be obtainable by formal education. How to make informal education serve the targeted poverty alleviation and rural revitalization and construction more effectively to drive the transformation of rural modernization is the current research topic needing to be solved.

It lays empirical foundation for geographic zoning of education. From the empirical perspective, it provides a theoretical perspective for understanding the informal education, enriches the research content of educational geography and provides theoretical reference for establishing informal education theory system in the future.

Fengxiao He

Yunnan Normal University, China

Empowerment Theory in Minority Community Education — Study on the Inheritance of Yunnan Minority Culture

As an important theory in social work practice, the theory of empowerment remains as a focal concept in the field of social work research in recent years. Taking the perspective of empowerment theory, this paper combines the development of rural minority community education in Yunnan with the creative background of a lifelong learning society. Focus on how minority communities in Yunnan province approaching a sustainable community development throughout a way of empowering learning.

This paper attempts to apply empowerment theoretical frameworks to analyze the problems, it is found that resource inequality is the main cause of urban-rural division. The primary of this paper is to analyze the power barriers in the development of rural minority community education, through the grant of external power and the improvement of internal individual capabilities. In addition, the investigation of the two paths to empowerment has stimulated the cognition of community residents' power and their potential. Awaken community education residents' potential educational needs, and put forward suggestions for the development of community education from three aspects: individual; organizational and community.

In terms of methods, take the Renan community of Shangri-La and Xizhou community of Dali in Yunnan province as examples. Tibetan and Bai are unique ethnic groups in the above two places. Renan community have a kindergarten founded by a monk, in addition to the necessary enlightenment courses, the kindergarten curriculum has also added Tibetan teaching. This kindergarten not only inherits minority languages, but also functions as a community education position to undertake the education of the entire community. At the same time, the Xizhou community in Dali has made achievements in traditional craft inheritance and family education. In summary comparing the two communities with the model of inheriting minority culture through community education empowerment, I'm looking forward to through the integration of two practical experiences:

minority language education and folk culture education, we can develop a new path suitable for the development of minority community education.

Shuhan Yang; Yanling Zhang; Chunhua Liu
Yunnan Normal University, China; Save the Children China Programme

Language Acquisition of Yi Nationality for Children Aged 3-6 Years in Weishan County Based on one Yi-Han Bilingual Original Picture Book: Baseline Investigation and Research Design

In Weishan county of Yunnan province, 34.1% of the population is Yi nationality, that language development of local children facing duals challenge, on the one hand, influenced by the mainstream culture and teenagers' preference, intergenerational fracture in the inheritance of Yi language is so destructive to cultural inheritance. On the other hand, the popularization of mandarin is crucial for children's future study in primary schools, but most of their grandparents and parents can't speak mandarin at all. Under such background, we did an action research in Weishan county supported by the World Bank, which aims to explore effective path of Yi culture inheritance. From an interdisciplinary perspective of education, linguistics, psychology and art, we designed a Yi-Han bilingual picture book in terms of folk tales for 3-6 years old children, and trained kindergarten teachers to carry out picture book reading in mandarin at the same time, then set up the experimental group and control group in local kindergartens to probe how Yi-Han bilingual picture books influence children's language acquisition. The preliminary findings include : (1) Yi-Han bilingual original picture books enhanced children's vocabulary accumulation of Yi language; (2) Yi-Han bilingual original picture book made a significant positive effect on 3-6 years old children's pronunciation of mandarin.

Yanjie Yang, Linxi Li
Yunnan Normal University, China

The Development of Pre-service Teachers' Professional View about Children Under the Apprenticeship System in Chinese Kindergarten: A Qualitative Analysis on Observational Diaries

In China, pre-service teachers who major in preschool education need to take a semester of internship in their senior year of college, so as to get familiar with the practices in kindergarten. Under the traditional intern apprenticeship system, every pre-service teacher will have two kinds of tutor: college teacher and kindergarten teacher, they work together to facilitate pre-service teachers' professional development. And pre-service teachers are demanded to observe children as while as conducting educational activities.

This study focuses on how pre-service teachers' views about children have changed, in order to describe their growth during the internship. Nearly 900 pieces of observational dairies written by 30 pre-service teachers (females=30) in the same kindergarten (Yuan Tong kindergarten) have been collected, and then been analyzed by using Nvivo. 3 main questions were answered: what event did the pre-service teacher observed and recorded; what did the pre-service teacher think about the event; what was the kindergarten tutor's feedback.

The study finds that: 1) pre-service teachers' observations on children go through 3 different periods during the whole internship: the stage of curious findings, the stage of interpretative findings, and the stage of summary; 2) pre-service teachers' reflection on their observation changed from reciting theories to utilizing theories to explain events; 3) kindergarten tutors' feedbacks focus on the method of effective observation and reflection, and the feedbacks depend on the interaction between pre-service teachers and kindergarten tutors.

Guohuan Yu
Beijing Normal University, China

The Influence of National and International Performances and Exhibitions on the Construction of Campus Culture of National Colleges and Universities --Take Southwest Minzu University as an Example

Campus culture is as a kind of environmental education power and has great influence on students' healthy growing up. Construction of campus culture is one of the requirements of building harmonious schools. It arouses more and more attention of scholars and social elites. As for national colleges and universities, national unity is the most important and necessary task. This article mainly discusses the aspect of spiritual culture construction and adopts observation, interviewing and some other research methods. The writer takes Southwest Minzu University as an example which is a cradle for 56 nationalities students and international students from all over the world and emphasizes the influences of national and international performances and exhibitions so that we can explore the further development and measures for the construction of campus culture of national colleges and universities. Through the study and communication with students and teachers, the writer draws the

conclusion that campus culture mainly has influences on students' psychological identification, way of thinking, horizon-broadening and learning ability and so on. Besides, the suggestions for construction of campus culture of national colleges and universities are as follows. Providing more opportunities for students to participate in activities; Assistance from different departments; Suggestions for international culture festival and museums; System guarantee; Integration and innovation.

Concurrent 4B: Teacher Leadership for Diversity and Creativity **分组会议 4B: 教师对于多样性和创造性的领导力**

Chunlei Liu, George Zhou
University of Windsor, Canada

Chinese Pre-Service Science Teachers' Cross-Cultural Experiences in Canada: A Narrative Inquiry

This narrative study explores the perspectives of Chinese science teacher candidates' cross-cultural learning experiences in Canada as they participate in a reciprocal learning program between the University of Windsor and the Southwestern University of China. This research builds on my one year as a research assistant for this program, which is part of the SSHRC Partner Grant Program between Canada and China. This study focuses on the personal and professional understanding of cross-cultural knowledge by science teacher candidates. The findings provide insights into the education of pre-service science teachers. In addition, the cross-cultural experience enhances the motivation of science teacher candidates to advance their education and will broaden the horizons of future students with a global perspective related to China's increasingly diverse society.

Vanessa Mio, Jonathan Bayley
University of Windsor, Canada

An Investigation of Chinese Music Students' Reciprocal Learning Experiences During a Three-Month Residency in Canada

Purpose. The present study investigated Chinese undergraduate music education students' personal and professional experiences during a three-month residency in Canada. Participants in this case-study design were undergraduate students who were in the process of completing a Bachelor of Education degree at Southwest University in Chongqing, China. This investigation represented a "bounded system" (Gay, Mills, & Airasian, 2012) within a "specific context" (Miles & Huberman, 1994). The Chinese students benefited from a SSHRC funded Canada-China Reciprocal Learning Program and also received financial support from their home university.

Conceptual framework. With respect to the nature of reciprocal learning, Boud (1999) states the following:

[Reciprocal learning] involves participants learning from and with each other in both formal and informal ways. It includes mutual benefits and a sharing of knowledge, ideas and experience among participants. The emphasis is on learning rather than teaching, and on the support and encouragement learners offer to each other, as much as the learning task. (p. 4)

Data source(s). Pre-service Chinese teachers were asked a wide range of open-ended questions relating to their early preconceptions of life in Canada, their coping strategies (e.g., language, local customs, environmental context) while in this foreign land, the curricular and pedagogical similarities and difference they experienced during their school visits, the nature of their relationships with their Canadian counterparts, and what possible impact this "once-in-a-lifetime" experience might have on their future educational and professional plans.

The data were coded ("descriptive labels") and appropriate themes were identified (Savin-Baden & Major, 2013). The findings indicated intellectual, social, and personal growth over this three-month period. Students spoke of overcoming the "fear of the unknown" and acquiring a self-awareness of their intellectual and personal growth. This investigation of reciprocal learning lived experiences provides academics, students, and administrators with constructive insights into the educational and personal growth of Chinese undergraduate education students, who have successfully negotiated the unfamiliar, adapted to the strange, and in turn have been enriched by a culture other than their own.

Terry Sefton
University of Windsor, Canada

Exploring Cultural Education in Art and Music in the Reciprocal Learning Project

This paper explores the perceptions and experiences of Canadian music teacher candidates, who have visited Chinese schools during the Reciprocal Learning Program. The research examines Personal Practical Knowledge (Connelly & Clandinin 1988) i.e., their prior experience and understanding of classroom education, and what impact (if any) the international reciprocal learning

experience has on reconfiguring their concepts and, potentially, their future practice. The international program of Reciprocal Learning connecting Chinese and Canadian teacher education students has been running for eight years, with cohorts of Canadian teacher candidates visiting China each spring. This paper will draw on current participants' experiences and include a retrospective of previous students' experiences.

Images are ubiquitous in contemporary society, and the advent of digital technology has made capturing and constructing images available to anyone with a smart phone. Visual sociology attempts to study visual images produced as part of culture. The visual culture of schools can be examined through its architecture, teaching spaces, and the ways in which teaching and learning leaves visible traces (Prosser 2007; Mah 2007). A series of photographs can reveal entire narratives or be arranged to represent complex social systems (Berger 1972). The viewer (both the photographer and the subsequent spectator) sees through a lens of difference, of interpretation, and of displacement. This is both a challenge and an opportunity. The act of looking is an act of translation (Author 2016).

This research applies a particular focus on art and music (cultural) education. Photo documentation of school and classroom culture will be analysed using photo elicitation and discourse analysis. Taking and comparing photographs of schools in China, the Canadian teacher candidates explore their own prior knowledge, expectations, and discoveries, and potentially construct a new frame of analysis through a "taxonomy of visual representation" (Burke & Grosvenor 2007).

Ju Huang, Xiangdi Qiu, Wenlin Ye, Yang Xiao

Southwest University, China; Shishi High School, China; Shude High School, China

Being a Cultural Ambassador: A Narrative Inquiry into a Chinese Teacher's Induction in Southwest China

This research is contextualized in a longitudinal Pre-service Teacher Education Reciprocal Learning Program, which is a part of the SSHRC Partnership Grant Project. It presents how a visiting EFL teacher candidate from a Chinese teacher education program experienced a three-month study trip in Canada in 2014 and how he goes through the induction process and experiences transformation in a magnet school in Chengdu. Particular attention is the relationship between teachers cross-cultural experience and his changing identity as a novice teacher, developing teaching practices, and beliefs to achieve the goal to be a teacher with global awareness in China.

This study adopts Clandinin and Connelly's (2000, 2006) narrative inquiry as the research methodology. It explores the cross-cultural experiential stories and induction process of Andi from his time in Canada, to his experiences as a beginning teacher in China.

The narratives show that being exposed to different cultural norms of knowing and being is conducive to the development of cross-cultural and new pedagogies. It also generates challenges, struggles, and dissonances that would stimulate deep reflection of the teacher's own culture, questioning of beliefs about teaching and learning and taken-for-granted practices, which in turn promotes transformational and reciprocal learning (Xu, 2011).

Narratives were collected in a number of ways over four-year period from his cross-cultural experience in Canada and induction experience in China, including field notes, interviews, informal face-to-face conversations via social media, and email correspondences, as well as document analysis of items such as the participants lesson plan, proposals, and reflections. The research follows Andi's cross-cultural experience and his first three years of teaching to see how he reflected on, questioned, and learned from his experiences.

Chen Li, Luxin Yang

Beijing Foreign Studies University, China

Exploring the Construction of Classroom Culture: Case Studies of Calligraphy Classroom at a Primary School in Beijing

This study examines the classroom-culture constructed in a Calligraphy classroom at a primary school in Beijing, which established sister-school partnership with a Canadian school through the Reciprocal Learning in Teacher Education and School Education between Canada and China. Multiple sources of data including interviews, observations, and documents were collected, and were analyzed drawing on the concept of classroom-culture (Yuan, Zhu & Song, 2016), which is defined as the presence of three co-affected parts including matters, institutions and values based on which learning and teaching is carried out.

Findings revealed that the static physical space, regulatory systems, and activity procedures constitute the calligraphy classroom-culture and are concurrent with the whole-school classroom-culture, which may be influenced by the national core values, the national or regional education policies, school common values, and the educational philosophy upheld by this school. Besides, the unique position of the calligraphy classrooms on campus and in the school culture make it distinguished from other so-called normal classrooms. The Chinese-style decorations and furniture, special materials and stationeries for calligraphy learning, and calligraphy-specific teaching procedures and learning activities explains the construction of classroom-

culture on a micro-level. The study may offer insights about interpreting Chinese students' collectivistic and individual learning in formal schooling, detecting the commonalities and differences in classroom-cultures, and thus facilitating the reciprocal learning between the Canadian and Chinese sister schools.

Concurrent 4C: Reciprocal Learning for a Global Future

分组会议 4C: 互惠学习的全球化未来

Thanh Buu Tran

University of Windsor, Canada

The Effects of Modernization on the Value of Chinese School Education

The western influence around the world has been strong due to the mass colonialism spreading the culture and ideologies. The economic success of the western countries has led to the desire of eastern hemisphere to follow in the west's footsteps to advance and modernize. One country in the east that has had an impediment towards modernization is China with its conflicting Confucius and traditional values. As China goes through its reforms and modernization, the rise of western values grows within society, thus, the value of western education has also grown. This modern paradigm has threatened the value of Chinese education as more parents and students have the perception of western education being superior to Chinese education. Value lies in the perception of the beholder, it does not give a clear understanding of the actual truths, characteristics, or quality. Chinese education is not well-known or considered advanced on the world scale, however, that does not prove the scale of its quality and performance. This study aims to uncover potential reasons why Chinese education is valued less than western education and the perceptions of Chinese education and it why Chinese education has not been prevalent in the world. The core of this study will analyze interviews conducted in Canada and China, the participants will be put into four categories that consist of 1) Chinese teachers that have been students in China who have never experienced education in a western country, 2) Chinese teachers and students who have experienced the education system in China and a western country, 3) Canadian teachers and students in Canada who have never experienced the education system in China, and 4) Canadian teachers and students who have experienced the education system in China and a western country.

Yuanrong Li, Guihua Zhang, Guoqing Zhou

Southwest University, China; University of Windsor, Canada

A Comparative Study of Pre-service Science Teachers' View of Nature of Science between China and Canada

The nature of science is considered to be an important part of scientific literacy, and the mastery of the nature of science is listed as an important goal and content of science education. Currently cross-cultural comparative studies show that Chinese science teachers' understanding of the nature of science is different from that of Western science teachers, but they have not explored the particularity of Chinese science teachers' understanding of the nature of science. This paper adopts questionnaire survey, interview and text analysis. Based on the mixed questionnaires and interviews, this paper investigates pre-service science teachers' view of nature of science, analyses the main manifestations of pre-service science teachers' different understanding of the nature of science between the two countries, and explores the influencing factors. At the same time, from the perspective of curriculum setting, it reflects on the shortcomings of pre-service science teacher education in cultivating the nature of science, and provides a basis for the design of teacher education curriculum for the scientific nature of pre-service science teachers in China.

Ruxandra Nahaiciuc, Yuanrong Li, Geri Salinitri, Gregory Driedger, Annette Nelson

University of Windsor, Canada; Southwest University, China; Greater Essex County District School Board, Canada

Water Projects, In Collaboration, Between Canada & China: A Reciprocal Learning Journey of Inquiry-Based Student Research

The Secondary Science Teams in Canada and in China have been exploring an inquiry-based approach to understanding inter-related water issues as part of the Canada-China Reciprocal Learning Program (RLP). The two teams responded to one of the main tenants of the project, which is to learn from one another in order to enrich the educational realities of teachers and students in both countries (Xu, 2013; Xu, Chen, & Huang, 2015). The purpose of the water projects study is to broaden student awareness of the importance of fresh water and its crucial role in global sustainability. This case study examines compiled data

results from the water projects of a secondary school in southwest China and the collaboration between a Canadian university in Southwestern Ontario and a local secondary school in partnership with the Great Lakes Institute for Environmental Research (GLIER). The vision for both Canadian and Chinese secondary students would be to not only share their findings through monthly Skype meetings, but to also successfully compete and meet at the World Water Week in Sweden. Though neither the Canadian nor the Chinese secondary students were invited to participate, the resulting lived experience of problem-solving for a shared interest are acknowledged by both sides as being a beneficial, shared learning process. Collected data also includes interviews for both teacher supervisors and students in Canada and China which reveal commonalities found in the reciprocal learning process for contributing parties, highlighting the increasing awareness of environmental issues through inquiry-based learning. For future examinations, this study recommends that Skype meetings be augmented with an accessible storage site and that both sides find ways to translate their progress in order to add to the shared findings of the secondary science teams in Canada and China.

Yishin Khoo, Adrienne Rigler

University of Windsor, Canada; Toronto District School Board, Canada

West-East Reciprocal Learning in Education Made Possible through School-based Narrative Inquiry with Water

This study was conceived at a time when there was a growing interest on why western and Chinese education systems should learn from each other and how. It was driven by an observation that even though there had been a lot of government and scholarly discussions around the means and ends of sino-western reciprocal learning in education, much of these discussions took place at an abstract level in the form of ideal curriculum; we know little about the possibilities, practices and implications of reciprocal learning at the level of classroom curriculum under the complexity of teachers' life and schooling. This study addresses the research gap by examining a series of sino-western reciprocal learning stories that have emerged in a Canadian classroom under a longitudinal Partnership project entitled "Reciprocal Learning in Teacher Education and School Education between Canada and China." Specifically, it explores how a Canada-China Sister School reciprocal learning partnership on water has transformed the lived curriculum of a Canadian classroom and initiated an ecologically-based school culture in a Canadian school. This study engages the idea of "reciprocal learning as collaborative partnership" and uses school-based narrative inquiry as its theoretical and methodological framework. It involves university researchers and school teachers working together as companions to explore and examine cross-cultural reciprocal learning problems, opportunities, and experiences taking place in the concrete lives of schooling using fieldwork methods. Through a three-year shared inquiry, we (the researchers and teachers) have learned to see Chinese and Canadian school curriculum in a new light. We conclude that "water" is a powerful idea that brings western and Chinese learners together for rich reciprocal learning. Cultivating shared water cultures between school systems allows classroom teaching and learning to be transformed towards a more ethical ends inclusive of historical cultural narratives and morality of different cultural groups in different societies.

Stephen Green

University of Windsor, Canada

Science and Environmental Education through Community Gardening: Growing Young PolySci Leaders

Community gardening in an urban educational environment is more popular than ever. This recent fad (or trend) seeks to transmute the many benefits of teaching young learners through science and environmental education. As a side benefit, young learners from all backgrounds are exposed to the processes necessary to grow their own food, communally, at school and often close to home and in an urban environment (Baker, 2004). It has also been the catalyst for more than a basket full of vegetables or issues of personal and community nutrition, fitness and frugal living. This paper seeks to uncover current interdisciplinary research being written regarding the social and ethnographic impacts of exposing young learners to establishing neighbourhood community gardens within the urban context. It also seeks to review intentional and unintentional sociological impact of the ethnobotanical community gardens, its various participants, and the geographies it is located within. For the purposes of this paper presentation, it would be helpful to clarify that a 'community garden' is defined by The American Community Garden Association (ACGA) as a space that

"...can be urban, suburban, or rural. It can grow flowers, vegetables or community. It can be one community plot, or can be many individual plots. It can be at a school, hospital, or in a neighbourhood. It can also be a series of plots dedicated to "urban agriculture" where the produce is grown for a market (ACGA, 2008)"

Politically, this garden, has somewhat unexpectedly found its way into school board meetings, city council meetings, agri-business industry, neighbourhood councils and provincial or federal politics. In fact, to the passionate educators and local

citizenry who tear up the concrete and till the earth in school yards, vacant lots, unused land or parks, it appears (in academic research) to have infiltrated almost every disciplinary and sub-disciplinary group. What some social scientists have called an 'urban revolution' may, instead, reveal itself to be a cleverly disguised societal 'Trojan Horse'. It has seeded doubt and controversy regarding the traditional dependence on our broken food system. It has been the source of Parent Advisory groups and voter registration parties lobbying for a stronger voice in their school hallways, council chambers, city halls and city streets. Community gardening is no longer strictly discussed at organic conferences or in paragraphs containing methods to "double-dig" your garden bed. According to recent interdisciplinary research, 'community gardeners' from pre-school to university, and their educators, are voicing their demands for micro and macro change in how we deliver science and environmental education- and rapidly forming organizations with strong political and municipal effect. Could this upsurge in educational, institutional community gardening and urban agriculture unpredictably, and unexpectedly, metamorphose into approach to how we teach the curriculum in our diversified classrooms? Will a new approach by our educators help our young community gardeners become society's next PolySci leaders ready and willing to challenge our current agri-food sectors?

Concurrent 4D: Canadian Pre-Service Teachers' Academic & Professional Development through reciprocal learning in China

分组会议 4D: 通过在中国的相互学习加拿大职前教师的学术和专业发展

Alana Wevers

University of Windsor, Canada

China and Canada: An Instrumental Music Education Comparison

The Teacher Education Reciprocal Learning Program is developed between the University of Windsor and Southwest University China, which is an ongoing SSHRC Partnership Grant entitled "Reciprocal Learning in Teacher Education and School Education between Canada and China." The goals of the Reciprocal Learning Program are to compare Canadian and Chinese education through knowledge and understanding from a cross-cultural perspective which provides framework for understanding and appreciating educational similarities and differences, arranges an exceptional experience with international engagement, broadens teacher candidate's horizons for a society of increasing diversity, fosters international collaboration and multicultural education. The significance of the SSHRC Partnership grant research is related to the notable amount of immigration of Chinese people to Canada. Because of the immigration increases, it is important as a Canadian future educator to develop a reciprocal community and education system.

Teacher candidates who participate in this program are provided Host supervisors who work closely with teacher candidates to help make connections in the schools and accompany them for visits and observations, provide instruction on how to properly conduct themselves within the culture, provide guidance to the student's project and grow their research questions in meaningful ways. In addition to host supervisors, teacher candidate will also have graduate students who will aid in communicating with the research site faculty and staff, provide guidance with teacher candidate's research project. The focus of my research topic is to compare instrumental music education between China and Canada from grades 4-8 to find out how musical instruments are taught in Chinese primary and middle schools. The research I will conduct will be to gain a better understanding of instrumental music curriculum and pedagogy in the Chinese education system. In addition, I will be learning the historical aspect of instrumental music that has been taught through generations to give context to the present-day education system in China. More specifically, my research will be focusing on instrumental music education investigating the following: pedagogical approaches, instrumentation (types of instruments), repertoire selection, class duration and frequency, public performances, and curricular focus (performance based only or comprehensive musicianship; state prescribed, or teacher chosen) in music for Grades 4-8 students in Chinese schools.

Caroline Voyer

University of Windsor, Canada

Special Education and Student Support in Canada Compared to Chinese and Canadian Elementary School Systems

Accommodations are an essential part of education for students with differing needs. In order for many students to reach their full potential and to succeed in education, there are a variety of different accommodations that the Canadian school system provides to help support all students. This study will explore how the Chinese education system supports students with special needs, compared to the Canadian education system. This research is contextualized in Dr. Shijing Xu's Reciprocal Learning Program between University of Windsor and Southwest University China and Xu and Connelly's larger SSHRC Partnership Grant Project. According to Xu and Connelly (2013-2020), their research takes as its starting point the idea of a global community in

which ideas, things and people move between countries and cultures. This research in conjunction with the larger partnership project will provide an understanding of the differences and similarities that exist between how the Chinese and Canadian educational systems support students with disabilities. Through observing student success as a result of different forms of individualized education this research aims to gain understanding of effective support for students with special needs. The aim of this study is to understand the similarities and differences that exist between the Canadian and Chinese support for students with special needs in high school classrooms. High school students are the focus of this study because they are at the stage in schooling where students take final exams, and are placed in a big school managing multiple subjects. The goal of this research is not to determine which country has the better system for students with disabilities, but rather to explore both systems and to see what either country can learn from each other. Looking at student success as a result of different forms of individualized education will help to gain understanding of effective support for students with special needs.

David Meloche

University of Windsor, Canada

Comparing the Cultural and Philosophical Differences Between Canadian and Chinese HPE Programs

The research that I am conducting falls under Dr. Xu's larger SSHRC Partnership Grant Project by comparing and contrasting Canadian and Chinese education. In my case, it is the Health and Physical Education (HPE) systems of Ontario and China that are being compared. I will be studying various aspects of China during my 3-month visit and noting the differences that I encounter inside and outside of the classroom. This information will be compared to Canadian culture and conclusions regarding Ontario's HPE program can be drawn based on my findings in China.

To conduct this research, there will be three primary areas of focus. Firstly, the Chinese philosophical approach to physical education will be examined. This includes the sports, games, dances, and attitudes towards exercise that are taught to students in their school curriculum in China. The average diet of Chinese students will also be examined as a contributor to students' energy levels and engagement with physical activity. Secondly, attention will be directed to the finances and resources that are available for physical education in China. Facility structure, sports equipment, location, and functionality of their system will all be considered in the comparison of the two HPE systems. Finally, the effectiveness of the HPE system administration will be studied in China. To determine this, the Chinese classroom structure, organization, and time allocation for physical activity will be examined and compared to that of Ontario.

The expected outcome of this research will be to gain a more nuanced understanding of the contributing factors towards a successful HPE program. Through building upon previous research (Salters, 2016) and applying these additional considerations, the Ontario schooling system will gain a new perspective as to how the current HPE curriculum can be adjusted to obtain additional student success.

Jillian Parker

University of Windsor, Canada

A Comparative Analysis of Outdoor Education in Chinese and Canadian School Systems

In today's highly globalised world, the field of education is not only increasingly competitive, but also increasingly diversified. In this regard, I have chosen to study, compare and analyze the structure of Outdoor Education, within the Chinese and Canadian contexts. This research is also contextualized with the broader research of Dr. Shiiing Xu's ongoing research project, entitled "Reciprocal learning in teacher education and school education between Canada and China." (Xu, and Connelly, 2008).

In keeping with Dr. Xu's ongoing study of the relationship and contrasts between the Chinese and Canadian systems of education, my research hopes to extend this comparison to the still emerging field of Outdoor Education. While Outdoor Education is a broad term which encompasses a wide variety of activities and subjects, the context of this field is also largely varied depending on the country in question. As detailed in a recent news release, Ontario schools are looking increasingly to Outdoor Education in order to keep students engaged and transcend the traditional stationary idea of learning (Globe and Mail, 2018). However, this field goes well beyond the trend of outside classrooms and the traditional style field trips.

In countries such as Scandinavia, a practice known as Friluftsliv, or 'outdoor life,' focuses on the importance of experiencing nature and being in close contact with the natural environment, in a subject considered more art than physical education (Neuman and Turcova, N.d.). In contrast, Ontario, and specifically Southern Ontario, has a heavy focus on the use of outdoor settings to teach leadership, exemplified by the strong tradition of the Muskoka Woods retreat.

Through my research, I hoped to discover if, and how, China adopted the structure of Outdoor Education and how that manifested in that particular education structure. Through these observations and comparisons, theories of how the Canadian and Chinese school structures can learn from one another in regards to outdoor education, and the implication this has for the students of each, as well as for the increasing number of students who traverse between them.

John Serio

University of Windsor, Canada

Nutrition and Health Education in Chinese School

The proposed research project will primarily make participant observations in Chinese schools and classrooms to study the role of nutrition and health education in China. The observations will be used to make connections and aid in reciprocal learning with Canadian schools. Ontario education places a strong focus on diversity in classrooms and being able to observe and participate in Chinese schools will provide excellent exposure to where many of the students come from. Literacy can be a challenge to many of these Chinese young children yet they can find many ways to develop multiliteracy skills in areas of health and physical education. Students in China are in school for a larger part of the day than students in Canada, but there are still many times of the day that nutrition is important. Proper nutrition is necessary for personal wellbeing, daily success, attentiveness, productivity and ability to focus and retain information.

The curriculum provides roles for parents, students and teachers. Students “can apply their learning about healthy living to make healthier food choices, help with meal preparation, and make decisions about substance use, sexual health and injury prevention” (Ontario Curriculum: Health and Physical Education 9). Parents are encouraged to help children “when making food purchasing decisions and preparing meals, discussing activity choices and ways of building fitness into each day’s activities, and creating or facilitating activity opportunities” (Ontario Curriculum: Health and Physical Education 10). Being able to learn and research ways in which this is incorporated into the Chinese curriculum can aid in comparing it with the Ontario curriculum as well as personal pedagogy. The information about Chinese nutrition in education and comparisons with the Ontario curriculum will help to aid foreign students in Canadian classrooms, allow us to incorporate diversity into our curriculum and strengthen multiliteracy skills. Observing the classrooms will help create strategies to work with students struggling in Canada, and more specifically with the language. A diverse nutrition program can be used in the curriculum as a tool to break down barriers between cultures and foster diversity in schools.

Mitchell Paterson

University of Windsor, Canada

A Comparative Study of High School Mathematics Curriculums and Pedagogies in Canada and China: A Case Study of Mathematics in the South-West Region

My research for 2019 will consist of evaluating the mathematics curriculum and teaching pedagogies of high school math teachers in China. My goal is to compare both Chinese and Canadian high school mathematics and depict similarities and differences. I find it very fascinating that there are many countries in the world, and that each country has a different system of teaching. My goal is to go out of my comfort zone on Canadian education by being able to go to a different country and learn their teaching pedagogy and how other countries structure their curriculums. In China, I want to be able to see what their curriculum is like and experience it firsthand. Doing this will help generate a better idea of Chinese education to bring back to Canada to improve our mathematics education system. My research will contribute to the larger SSHRC Canada – China Reciprocal Learning project to expand it to the high school setting as the research that has been done by the math team in the project has focused on elementary schools. Math team research shows that “there is a common emphasis on some thematic issues in the teaching and learning of mathematics including the use of manipulatives, multiple solutions to mathematical problems, and parental involvement, but also some differences between the two schools in teachers’ strategies for teaching problem solving, students’ learning tendencies and schools’ supports for special needs students” (Peng, Ezeife & Yu, 2018, p.1). I will see if there are differences and similarities between Canadian and Chinese high school teachers in this way which will help my proposed research and contribute to the larger project as my research will take place at the high school level.

Ryan Dodich

University of Windsor, Canada

Evaluating the Influence of Student-Teacher Relationships on Chinese and Canadian Elementary School Systems

My proposal aims to observe and study elementary school student-teacher relationships between China and Canada in hopes to demonstrate how understanding cultural aspects can benefit the education systems of both countries. Direct observation will help me to understand if cultural aspects are influenced by the pedagogy of the school teachers. Strategies for and Successes with Promoting Social Integration in Primary Schools in Canada and China (2012) described one facet of student-teacher relationships, socially integrating students, as being conducted similarly in China and Canada. The main difference is the degree of emphasis each school system places on their integration strategies (Dyson, 2012).

My proposal will contribute to the understanding of classroom dynamics and influences of the teacher that Globalink Research Award Proposal researchers were not aware of before. This may also include factors such as trust and level of how much the student feels they can confide in teachers. In addition, this would also shed light on the effectiveness of the different teaching styles of each education system, and how it affects students outside of basic academic achievement. Finally, my research proposal will help contribute to bringing diversity to Windsor's education system. This is achieved through contributing to Dr. Xu's overall research and actively trying to promote reciprocal learning between China and Canada. Windsor's classrooms contain high levels of diversity among students and the lack of understanding of other cultures can have a negative impact on learning (Dwairy, 2004). This is important as a future elementary school teacher and meeting the needs of students. This also provides both education systems a framework for reference in adjusting policies related to student-teacher relationships in the future.

Taylor Pare

University of Windsor, Canada

Opera in Canadian and Chinese Music Classrooms

My research topic focuses on vocal music and pedagogy in the classroom; specifically the study of Opera. The main objective of this project is to explore, evaluate, and compare the importance of studying and performing vocal pedagogy, techniques, and repertoire within the Chinese and Canadian music curriculum. The goal is to share musical knowledge and repertoire to produce a deeper understanding and appreciation for music on an international scale. I also have the opportunity to research and witness the Chinese Operatic form, Jīngjù (also known as Beijing or Peking Opera in the Western Hemisphere), and compare this musical genre to the Western Operatic form. The significance of this project is to expand upon the current knowledge of international methods of teaching music, specifically vocal pedagogy. Musicians are always encouraged to study multiple musical genres because it benefits and improves overall performance skills and pedagogical knowledge. In addition, I can develop a more inclusive pedagogical approach to teaching students from different cultures and backgrounds; specifically Chinese immigrant students. My research project is a component of the Reciprocal Learning Program and SSHRC Partnership Grant project run by Dr. Shijing Xu and Dr. Michael Connelly respectfully. This program works to promote the sharing of cultures, individuals, and relationships within a global community. Canada-China relations are often discussed in terms of economics, trade, and civil rights. But in the rise of a knowledge-based society, education is crucial to economic development (World Bank, 2007). Following my return from China, I plan to collaborate with Dr. Xu and Walkerville Colligate, a local specialized art high school, who are planning a production of Jīngjù here in Windsor, Ontario. From a teaching perspective, incorporating a varied musical curriculum can inspire the students' imagination and musical development in the classroom and musical lives.