Developing Students' Intercultural Competence through Web-based Inquiry Learning

By Mo Wing Pik

1.1 Introduction

This study shall use exploratory research methodologies. The purpose of this study is to explore whether web-based inquiry learning enhances students' intercultural communicative competence (ICC) and what are the challenges when students interact with the web-based inquiry activities in a year 5 non-Chinese background class in Hong Kong.

In chapter 2, the literature review provides a guide for designing this research. The research is designed to follow the Byram's (1997) intercultural communicative competence framework which encompasses knowledge, attitudes and skills. Interpretive is the main research paradigm adopted in this study. A positivist approach has not been used as it focuses on the cause of social affair whereas the interpretive approach focuses on the purpose, which involves both human motive and reason (Lin, 1993). A mixed research method is employed to conduct the study. Both qualitative and quantitative data will be collected and analysed to seek the answer for the following questions:

- 1. Whether Web-based Inquiry learning enhances students' intercultural competence?
- 2. What are the challenges when students using web- based inquiry activities?

The following sections describe the research design including; research background, research methodology, participants, data collection instruments, data analysis, and conclusion of the study.

1.2 Research methodology

A mixed method is employed in this study to investigate whether inquiry-based activities enhance students' intercultural learning. Mixed methodology combines quantitative and qualitative research techniques, methods, approaches, concepts or languages into a single research (Creswell, 2002). A mixed methods research design is a procedure for collecting, analysing, and "mixing" both qualitative and qualitative methods in a single study or a series of studies to understand a research problem (Creswell & Plano Clark, 2011).

Greene and Caracelli (2003) described that the advantage is of using a variety of both qualitative and quantitative data and analytic techniques is to better achieve the research objective. Mixed methods research is an emerging research approach in the social and health science that involves combining both statistic trends and stories to study human and social problems (Creswell, 2012). Creswell also suggested the use of hybrid design names is something new and indicates an emergent trend with the mixed method approach. Plano Clark (2010) found that an increased use of the language and customs of mixed methods by practicing researchers compared to other reviews.

Deardoff (2006) suggested that competence can be measured but its measurement depends first on its definition. By having a clear definition of the intercultural competence, we can reduce confusion about intercultural competence and guide teachers to choose from the reviewed methods based on their individual needs. Deardoff (2006) also noted that a quantitative method does not seem the best suited to measure a person's intercultural competence and that high education administrators were nearly unanimous (95%) in using a mix of qualitative and quantitative measures to assess students' intercultural competence, the intercultural scholars agreed that the best way to assess intercultural competence is through a mix of qualitative and quantitative measures. Therefore, a mixed methodology is employed in this study.

1.3 Research Background

1.3.1 Contextual Background

In the current global society, people moving between countries for business or traveling has greatly increased. Chinese is the language of communication of approximately one quarter of the world's population (NSW curriculum report). Yang and Chen (2004) reported in *Hanban News* the number of Chinese language (Putonghua) learners has reached 100 million since 2004. Whilst there are large numbers of those learning Chinese, according to one investigation into L2 learning of Chinese in Australian, 95% of L2 learners abandon their studies at the early stage (Orton, 2015).

Preparing students to respond positively to the opportunities and challenges of their rapidly changing world is today's education focus and communication skills are one of critical four Cs (Critical thinking and problem solving, Communication, Collaboration and Creativity) of 21st century. Linguistically and culturally effective communication is essential to contribute successfully to the "global team" (Dennis Van Roekel). The New South Wales Chinese curriculum states:

"...Students will develop knowledge of the culture of Chinese-speaking communities and an understanding of the interdependence of language and culture, thereby encouraging reflection on their own cultural heritage."

In 2012, 18771 students were leaning Chinese (Mandarin) in New South Wales primary schools making it the most commonly taught language in that states primary schools in 2012 (NSW, 2003)

1.3.1.1 Participating School Local Background

Despite its international cosmopolitan appearance, Hone Kong is ethnically quite homogeneous. About 97% of its population is ethic Chinese and no more than 3% of the entire population are native English speakers. English has been valued by society as a language of economic and social advancement (Lin, 2009).

The participating students' school vision is to be recognised as an innovative international school delivering quality education based on the New South Wales, Australia curriculum and values. Its mission is to provide a world-class international school where students, through active participation, achieve their personal best and graduate as skilled, influential and responsible international citizens.

The school has been established for over 20 years and is a co-educational, nondenominational English-medium International school with more than 1,100 students. The primary medium of instruction is English with Putonghua a compulsory subject from Reception to year six. The Putonghua curriculum has been modified from the New South Wales curriculum to better apply to its Asian setting. Whilst English is the medium of instruction, occasionally, languages other than English may be used to supplement a student's understanding of a difficult topic or concept. The schools teaching and learning methods are inquiry-based and trans-disciplinary.

1.3.2 Pedagogical Background

This research aims to explore an effective pedagogy to help non-Chinese students to obtain knowledge, develop skills and show positive attitude towards Chinese language and culture studies. Communicative approaches focus on all components, not just speaking and listening, but form and function that engage students in meaningful communication, fluency and accuracy, real world contexts, engage student's autonomy and independent leaner. Kaufman, et al (2004) described that learning for child occurs through construction of new understandings through reading, listening, exploration, and experience. They also suggested that learning should be more meaningful to students when they are able to interact with a learning content. Constructivism utilizes interactive teaching strategies to create meaningful contexts that help students construct knowledge based on their own experiences which can help engage and motivate students by making them take a more active role in the leaning process. Active engagement, pursuit of diverse paths to discovery, concept acquisition, and external and internal scaffolding are central to the learning process (Vygotsky, 1978). Learners construct knowledge through participating meaningful activities in response to questions in their understanding and experience during the learning process. Everything is constructed, all knowledge is an answer to a question, if there is no question, there can be no scientific knowledge (Bachelard, 2002).

1.3.2.1 Participating School Pedagogical Background

The participating school's curriculum is adapted from the New South Wales government's curriculum to suit the schools international setting. Teaching methods are inquiry-based and trans-disciplinary. Chinese is a compulsory subject from Kindergarten to grade six with all years receiving five lessons per week of 45 minutes duration for each lesson.

Chinese language curriculum is divided into two different streams; Communication Competence (CC) and Communication Literacy (CL). The CC stream syllabus is structured around the "Better Chinese" text books, whilst the CL lessons are adapted from "Zhong Wen" (*Chinese*) texts. "Zhong Wen" is published by the Chinese Government Overseas Chinese Affairs Office and is particularly aimed at overseas Chinese learners.

The school year comprises of two semesters with each semester divided into two terms. A term is 8-10 weeks duration and two relevant topics are selected from the Better Chinese text book each term for CC group students. Whilst the school's overall teaching and learning method is inquiry-base, Chinese teaching methods heavily rely on memorization and drilling transmission models to teach the language. Character memorization and grammar drilling method are commonly used in Chinese classrooms within the school as all students are required to take a standardized test at the end of year to determine the following year's class allocation. Prahbu (1987) argued that grammar is too complex to be taught, and second language acquisition researchers like Krashen (1982), claims that grammar can only be acquired unconsciously through exposure to the target language. Krashen (1982) further argued that exploring culture differences provides more opportunities for learners to exposure the target language and gain the knowledge of grammar.

1.4 Participants

Twenty-two year 5 students include 13 Girls and 9 boys from an International school in Hong Kong are participated in the study. Sixteen students are monolingual English speakers and do not have any Chinese heritage. Four students are ethnic Chinese but only communicate in English at home and socially. Although these four students have Chinese background, they are deemed monolingual English speakers with Putonghua as their second language. The remaining two students are neither native English nor Chinese speakers (one student comes from Vietnam and the other comes from India). As such, Chinese is these students' third language.

Table 1 shows approximately 90% of students are Australian and are monolingual English speakers. Approximately 30% of participating students have been learning Chinese for over 5 years, 40% for 3-4 years and 20% for 1-3 years. Even though the students have learnt Chinese for different periods of time, they are still considered have similar standard skills and achieved similar results in benchmark assessments

. Table1	_Participants'	information:	
----------	----------------	--------------	--

Number of	Australian	Non- Australian	Monolingual English	English as a second	Over 5 years of	3-4 years Learning	1-3 years Learning
Students		- i i usti uni uni	speaker	language	learning Chinese	Chinese	Chinese
23	20	3	20	3	7	10	5

In addition to the student participants, the research project will also involve a partner school in Guizhou province, China. Students from the partner school school will participate in a "pen-pal" exchange with the research participants in Hong Kong as a method to assess the participants inter order to assess participant's intercultural competence.

1.5 Conceptual framework of ICC

Byram (1997) developed an ICC model that involved three dimensions of intercultural knowledge, attitudes and skills. Table 2 shows the definitions and assessing the three dimensions. ICC is the ability to communicate effectively and appropriately in intercultural situations based on one's intercultural knowledge, skills and attitudes" (Deardorff, 2004).

Three	Definition	Assessing
dimensions		
Knowledge	Knowledge of social groups and their	Paper and pen testing to measure the
	products and practices in one's own and	degree of students have learned
	in one's inter-locutor's country, and of	certain cultural facts. Three domains
	the general processes of societal and	of humanistic, anthropological and
	individual interactions.	sociological approach to be
		considered to assess Knowledge.
Attitudes	Curiosity and openness, readiness to	Focus on learner understanding of
	suspend disbelief about other cultures	differences and similarities between
	and belief about one's own.	cultures and to take into account
		other identities, beliefs and values in
		reference to their own.

Table2_Definition and assessing the three dimension of Byram's ICC model:

Skills	Ability to interpret a document or event	To assess learner's ability to function
	from another culture, to explain it and	and interact in the target language
	relate it to documents from one's own.	and how students adjust to social and
		cultural environment.

To identify whether students' knowledge, attitude and skills have improved, Bennett's (1993) Developmental Model of Intercultural Sensitivity (DMIS) consists of six linearly progressive stages grouped into two worldviews, ethnocentric (denial, defense and minimization stage) and ethnorelative worldview (acceptance, adoption and integration) which provides the scales for measure students ICC. Figure 1 is the DMIS model shows the stages from ethnocentric towards ethno-relative and table 3 presents the definitions of each stage.

Figure 1: Developmental Model of Intercultural Sensitivity

Denial ⇒ Defense ⇒ Minimization ⇒ Acceptance ⇒ Adaptation ⇒ Integration

Ethnocentric Worldview	Ethnorelative Worldview
------------------------	-------------------------

Table 3_the definitions of each stage of DMIS

Worldview	Stages	Definition	
	Denial	The individual denies the difference or existence of other	
Ethnocentric		cultures by erecting psychological or physical barriers in	
Worldview		the forms of isolation and separation from other cultures.	
	Defense	The individual reacts against the threat of other cultures by	
		denigrating the other cultures (negative stereotyping) and	

		promoting the superiority of one's own culture.	
	Minimization	The individual acknowledges cultural differences on the	
		surface but considers all cultures as fundamentally similar.	
	Acceptance	The individual accepts and respects cultural differences	
Ethnorelative		with regard to behavior and values.	
Worldview	Adaptation	The individual develops the ability to shift his frame of	
		reference to other culturally diverse worldviews through	
		empathy and pluralism.	
	Integration	The individual expands and incorporates other worldviews	
		into his own worldview.	

1.6 Pedagogical design

1.6.1 Working model for intercultural learning in hybrid language learning and collaboration

In order to build on a learning environment for students to acquire knowledge about the target cultural understanding of the curriculum set topic, a web-based inquiry is designed for students to follow the learning process and answer the task questions provided. Figure 2 outlines Lawrence's (2013) working model for intercultural learning in hybrid language and collaboration that will be the guidance to design the Webquest. This model consists of three key stages in building investment in online intercultural language as shown in the following diagram.



Figure 2. Working model for intercultural learning in hybrid language learning and collaboration.

1.6.2 Collaborative Planning and Preparation

According to the participants' school curriculum planning, each taught topic is explored over an eight week period. The first two weeks to introduce the new vocabulary, sentence structures and selected readings. When students have obtained the basic knowledge of the topic, they then move to the inquiry task-based activity which involves a central research question. Before the project commences, students and teachers will work together to plan and explore what can be learnt in the project. At this stage, students are required to focus on collaborative planning and preparation. Students are asked to complete the first three columns of KWHL chart (what I <u>K</u>now, what I <u>W</u>ant to know, <u>H</u>ow will I find resources and what have I Learnt) and plan how to achieve their desire of what they want to learn. As Potts (2005) noted, engaging learners in the development of the topics and nature of the interactive collaboration can provide motivation. Students are motivated when they are planning what they want to learn that is not the teacher force them to learn. Lawrence (2013) argued that during the planning stage educators can ask students what they would like to learn about the other classes, about other ways of communicating, about their partners' lives, views, and cultural experiences and learners can explore the interrelatedness of culture, language use, and technology including ritual language use, such as greetings, asking personal questions, and topics in online vs. face-to-face contexts.

WebQuest design

Dodge (1995), provides a constructivist inquiry framework for learning. Its principal components include; introduction, task, process and evaluation for learners to explore

problems or potential problems, ask questions, assess what is known, and develop a strategy to intervene.

The WebQuest (<u>http://zunal.com/webquest.php?w=299260</u>) is a pilot study based on student and teacher collaborative planning following the mandated curriculum of term four's topic of "animals". This topic is planned to be taught over 8 weeks. Students are required to focus on the basic vocabulary and sentence structure during the initial two weeks followed by collaborative planning and KWHL (Appendix_ KWHL) completion in week 3 for their project of "Why is the Panda the national animal of China?"

1.6.3 Building identity investment

In online intercultural language learning, actively working with learner identity along with intellectual and cultural capital can play a key role in building identity investment in a learning community (Dörnyei 2007). Potts' (2005) study found personal narratives encouraged self-reflection and allowed students to locate themselves in a position of expertise. During the intervention of WebQuest learning, students are required to write letters through mail or e-mail to communicate with their pen pals about the Panda. Throughout the communicative approach and project based learning, students are acting as experts and then apply their knowledge in a real world community by the communication tools of email and traditional mail. Lawrence (2013) reported that students wrote about topics with which they had intimate experience, combining experience with formal knowledge to support their assertions about language learning and leveraging their expertise to position themselves within the community. This communication provides opportunities for students to increase their confidence to build a

relationship with their pen pals. O'Dowd (2003) also found that students engaging in dialogic interaction with partners about their home and target cultures resulted in increased intercultural awareness.

1.6.4 Active intercultural work

This stage helps students to use their target language skills to build a bridge across the culture range to interact with the target culture group, with the intention of gaining deepen intercultural competence. Lawrence (2013) points out that in this stage, educators have a role to actively monitor online interactions, check in with learners, revisit culture general learning principles, introduce relevant intercultural learning topics, and to encourage rich point sharing in a nonthreatening manner. DcCapua and Wintergerst (2004) argues that the teacher's role is to help learners become aware of the role of culture in shaping interpretations of one's self and others and to enable learners with 'different ways of seeing' and the teacher should not impose on participants' their own interpretation but let students see how their peers interpret the phenomenon and encourage curiosity and openness about these interpretations, offering intercultural support where needed.

1.7 Data collection instruments

Consistent with the purpose of seeking the best answers for the research questions, this section provides the details of data collection process. Table 4 indicates the data collection methods and theoretical underpinning applied to these two questions. Table 5 shows the data collection instruments, participants and duration.

Research questions	Data collection methods	Theoretical underpinning
Whether web-based inquiry	Pre, during and post survey	Byram's (1997) three
(WBI) enhances student's	Teaching reflective journal	dimensions of Knowledge,
intercultural competence?	Group interview	Skills and Attitudes.
	Semi-structured question	Bennett's (1993)
	Students Portfolio	Development Model of
		Intercultural Sensitivity
What are the challenges	Teaching reflective journal	Lawrence's (2013) working
when students using web-	Group interview	model for intercultural
based inquiry activities?	Semi-structured question	learning in hybrid language
	Individual interviews	learning and collaboration.

Table 4: Research methodology applied to these research questions

Table 5: Data collection instruments and duration

Source of data	Type of data collecte	Data collection period
Pre and post-Survey	All participants	Before and after intervention of inquiry-based activities
Interviews	Group interview, randomly	During and after the
	chose from high, middle and low group, in-depth individual interview	intervention
Teacher's reflective	Teacher/ researcher	Pre, during and post interactive
journal		with Web-based inquiry
Portfolio	All participants	During intervention with
		inquiry-based activities

1.7.1 Questionnaire design

Important process when designing a questionnaire includes: proofread, avoid sloppy presentation and lengthy questions, and use structured items with a variety of possible responses (Byram and Morgan, 1994). A six-point scale questionnaire (Appendix A) was used to respond to each question with 6 indicating strongly agree, 5 agree, 4 slightly agree, 3 slightly disagree, 2 disagree and 1 strongly disagree. The questionnaire consists of 3 sections; cultural knowledge, skills and attitudes outcomes and it is designed based on the "Items for Intercultural Sensitivity Measure" which is developed by Chan and Starosta (1997) who conceptualized intercultural sensitivity as a person's ability to develop a positive emotion towards understanding and appreciate and effective behaviour in intercultural communication. The questionnaire is modified from the 50 items questionnaire of Bennett's (1986) Intercultural Development Inventory (IDI) to suit the particular age group participants. Bennett (2004) argued that the IDI as a measurement of experience is a better base for inferring intercultural competence. This same questionnaire is used for pre and post intervention to define the differences before and after of using web-based activities that measure different stages of intercultural sensitivity based on Bennett's (2004) DIMS as defined in the framework section.

1.7.2 Teacher's reflection journal

Francis (1995) argues there is no one best method of teaching and there is frequently a lack of consensus about what schools ought to be doing, whose interests they are serving, and about what they are achieving. A teaching journal provides an opportunity for teachers to reflect on their own class practice and plan their future teaching based on their past experience. It also allows them to develop their own attitude, skills and confidence

according to their learners individual needs and their school's curriculum design to find better strategies to address their own class problems.

Francis (1995) concludes four a step guideline for reflective writing to assist teachers in writing a reflective journal. The four steps are; summary, new leaning, questions and personal reaction. Summary is to briefly describe the key points of what has happened in the class include the content, activities, students involvement. New learning describes the major new insights that come out of the session. This is based on the summary of the lesson and come out with any new ideas if this lesson is reset. Questions that emerge from topics, issues or strategies and keep asking questions about how the lesson could held differently, why the lesson approach should continue and how to make the lesson better through content and management strategies.

Whilst Francis' (1995) guidelines will be used as a basis for my reflection, it will be used as a guide only as it is not possible to write the reflective journal each day in such a formal format.

1.7.3 Interview

Interviewing is a research method typically involve the researchers to directly interact with the participants, assess their experiences and perceptions, and develop an understanding of the phenomenon under study from the perspective of the participating human actors (Yin, 2002). It is widely used in social research and there are many scholars who have used interviews to examine the impact of studying abroad on students' personal and intellectual development. However, existing literature tends to discuss interviews in terms of a research method that evaluates education interventions rather than a method that assesses student learning. Because of this focus, details on using interviews for classroom assessment, such as what questions to ask and how to assess interview feedback, are difficult to find.

Byram and Morgan (1994) argued that interviews can be particularly useful at assessing students' intercultural sensitivity because students can be ''far more forthcoming in an informal interview than in a formal examination situation''. Interviews can be structured or open ended. Structured interviews ask students to provide restricted answers and are more reliable and easier to assess, but highly structured interviews can become ''a multiple-choice test administered orally'' which, as standardized awareness tests, will suffer in assessment validity. Through face-to-face interviews, we can gather more evidence, including nonverbal cues, on whether students truly possess respect, empathy, or an open mind toward other cultures. Focus group interview, depth interview and semi structure interview are the main instruments for exploratory research.

In this research, focus group interviews were conducted. Each interview group consisted of four students with mixed gender and expression ability from the mixed ability group. Interviewees shared their understanding of the topic and the interview allowed even quiet students to express their views. Depth interview participants were invited from those students who were seen as generally open minded and active in the class. For group and depth interviews, a semi-structured interview method was used.

1.7.4 Portfolio

A number of scholars have suggested that using portfolio to assess student's intercultural competence. A portfolio is a collection of various materials that demonstrates intercultural interaction and competence (Ingulsrud et al. 2002; Jacobson, Sleicher, and Burke 1999). Students' portfolios include weekly reflective assessments and tasks undertaken during Webqwest intervention and interactive letters and e-mails with their partner group pen pals.

Weekly reflective assessments require students to review and consolidate their learning. It encourages students to explore produce prior experience and reflect on new knowledge learnt during the week. Students reflect on language components including weekly reading, vocabulary and sentence structures. Such reflections allow students to understand cultural differences between them own and their penpal.

The portfolio also includes tasks undertaken in Webquest. These tasks are designed for the particular topic covered in the inquiry of task-based leaning. Interactive letters and e-mails are the evidence for students interaction with their pen-pals during and after web-based inquiry activities. An advantage of portfolios is that they 'better represent the complexity of the cross cultural experience' (Ingulsrud et al. 2002, 476). A major advantage of portfolios is that they can be used to collect rich and detailed evidence of learning over time. Yancey (1999) recognized that a portfolio of students' work can lead to more reliable and valid assessment than standard tests or single-paper assessment.

1.8 Data analyses and interpretation

This study is an exploratory research and it is based on ethnography which relies on study the culture and how the person interacts with it. It is considered human practical interest (Habermas 1970) which is concerned with understanding the meaning of human action and communication. Interpretive is the main paradigm approach adopted in this research. This section focuses on an explanation of how intercultural competence is assessed and measured. Figure 3 indicates the students' stage of IC before using webbased inquiry learning and hypothesizes the stage of IC after the intervention of webbased inquiry activities.

Figure 3: Hypothesis of achievement after inquiry –based learning

Pre intervention —

After intervention

1	Web-based inquiry based learning				
Attitude Knowledge Skills					
Denial	Denial Defense Minimization Acceptance Adaptation Integration				
Ethnoo	Ethnocentric worldview Ethnorelative worldview				

1.8.1 Steps to assess

Denise Lussier (2007) suggested three steps to assess students ICC; when to assess, what to assess and how to assess. These steps will be followed to determine students ICC as they were taught topics from Unit 1 and Unit 2: My family and The Zoo.

Table 2: Steps in assessing students' performance and perceptions

When to assess?	What to assess?	How to assess?
Before starting teaching the unit	Knowledge	K(What I <i>Know</i>) W(What I <i>Want</i> to know)
Pre Web-based inquiry teaching	Knowledge Skills Attitude	Pre-survey Interviews Collaborative planning
During Web-based inquiry teaching	Knowledge Skills Attitude	Teaching reflective journal Class tasks Letters or Emails for pen pals Interview (unstructured)
After Web-based inquiry teaching	Knowledge Skills Attitude	Post survey Interview (semi-structured) Teaching reflective journal

End of the unit	Knowledge	Unit test
	Skills	Portfolio
	Attitude	

1.9 Conclusion

This chapter has addressed all the methodologies of investigating the process of ICC acquisition and assessments. It described the overall design of the research, including conceptual framework, research background, inquiry-based activities design, methods of data collection and analysis.

1.9.1 Trustworthiness

The data collection only commenced after ethical approval was granted for this research by Faculty Research Committee of The University of Hong Kong. This research did not pose any hazard nor risks for the participants as it was conducted in a naturalistic learning group based on the participating schools policies. It did not interrupt students learning content as the topic of inquiry-based approach was designed according to the school's curriculum and did not disturb participating students' regular school schedule as the intervention was part of the prescribed Chinese teaching routine. The constructive inquiry-based methodology was adopted in teaching Chinese and aligned with the schools teaching and learning principles and methods. Interviews and surveys were undertaken during school hours.

Before commencing the data collection, all participants, their parents and the school administrators were informed about the research purpose and invited to participate. All participating students and their parent or guardian were required to provide written consent form. Participants, their parents and the school administration were advised that they could withdraw from the research at any time.

As the researcher was the participants' class teacher, to avoid research bias, semistructured group and individual interviews were conducted by third parties. In order to enhance confidence in the research findings, data was collected using multiple sources and data collection instruments. To remove bias from the researcher's personal reflection journal's, classroom recordings were made and checked against the journal contents to ensure accuracy. Participating students' portfolio provides unbiased evidence of their understanding and progress which can lead to more reliable and valid assessment than standard tests or single-paper assessment (Yancey 1999).

1.9.2 Validity and reliability

Denscombe (2002) pointed out that validity concerns the accuracy of the questions asked, the data collected and explanations offered, the reliability related to the methods of data collection and concern that they should be consistent and not distort the findings. This research used method design based on Bennett's (1993) theoretical framework of MDIS. The questionnaires used for pre and post survey in this study were established using Intercultural Development Inventory (IDI) assessment items and modified to suit the participants' age and contextual background. Hammer et al (2003) claimed that the final fifty items from the IDI model can be used with confidence as a measurement of the six stages of the DMIS model which is largely supported by testing associated with the development of the IDI. DeVellis (1991) reported that a panel of experts from the most cited authors in the intercultural filed agreed that this aided in further establishing the relevancy of the items to the construct of intercultural competence as well as providing initial reliability and validity estimates

1.9.3 Significance

It is hoped that the research findings will benefit teachers in developing materials and teaching cultural pedagogy and help academic administrators assessing students' intercultural competence. The research provides detailed procedures in how to design inquiry-based activities aimed at developing students' Chinese culture understanding. In particular, it presents an essential guide to the participating school's Chinese teaching methodology to better support the school's inquiry-based teaching principles.

1.10 Reference

- Bachelard, G. (2002). *The Formation of the Scientific Mind*: AContribution to aPsychoanalysis of Objective Knowledge (M. McAllester Jones, Trans.).Manchester: Clinamen Press Ltd.
- Bennett, J. M. (1993). Cultural marginality: Identity issues in intercultural training. In R.M. Paige (Ed.), Education for the intercultural experience (2nd ed., pp. 109-135).Yarmouth, ME: Intercultural Press
- Bennett, M. J. (1986). Towards ethnorelativism: A developmental model of intercultural sensitivity. In R. M. Paige (Ed.), *Cross-cultural orientation: New Conceptualizations and Applications* (pp. 27-70). Lanham: University Press of America.
- Byram, M., & Morgan, C. (1994). Teaching-and-learning language-and-culture. Bristol, PA: Multilingual Matters.
- Byram, M. (1997). *Teaching and assessing intercultural communicative competence*.Philadelphia, PA: Multilingual Matters.

- Chan, G. M., & Starosta, W. J. (1997). A review of the concept of intercultural sensitivity. *Human Communication*, 1, 1-16.
- Creswell, J. W. (2002). Educational research: Planning, conducting, and evaluating quantitative and qualitative approaches to research. Upper Saddle River, NJ: Merrill/Pearson Education
- Creswell, J. W. & Plano Clark, V.L. (2011) *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage
- Deardorff, D. K. (2004). The identification and assessment of intercultural competence as a student outcome of international education at institutions of higher education in the United States. Unpublished dissertation, North Carolina State University, Raleigh.
- DeCapua, A., and A. C. Wintergerst. 2004. Crossing Cultures in the Language Classroom. Ann Arbor, MI: Michigan University Press.
- Denise Lussier et.al (2007) Guidelines for the assessment of intercultural communicative competence. Retrieved from <u>http://book.coe.int</u> Council of Europe Publishing F-67075 Strasbourg Cedex
- Dennis Van Roekel. an educator's guide to the four Cs preparing 21st century students for a global society. Retrieved from <u>http://www.nea.org/assets/docs/A-Guide-to-</u> <u>Four-Cs.pdf</u>
- Denscombe, M. (2002). Ground Rules for Good Research. Buckingham: Open University Press
- Dodge, B. (1995). Some thoughts about Web-Quests. Retrieved May 10th, 2008, from http:// WebQuest.sdsu.edu/about_WebQuests.html
- Dörnyei, Z. 2007. "Creating a Motivating Classroom Environment." In International Handbook of English Language Teaching. 2Vols. edited by J. Cummins and C. Davison, 719–731. New York: Springer.
- DeVellis, R. F. (1991). Scale development. ThousandOaks, CA: Sage. Foreign Language Annals, Vol. 46, Iss. 2, pp. 191–212. © 2013 by American Council on the Teaching of Foreign Languages. DOI: 10.1111/flan.12026
- Francis, D. (1995). The reflective journal: A window to preservice teachers' practical

knowledge. James Cook University of North Queensland, Australia.

- Geoff Lawrence (2013) A working model for intercultural learning and engagement in collaborative online language learning environments, Intercultural Education, 24:4, 303-314, DOI: 10.1080/14675986.2013.809247
- Greene JC, Caracelli VJ (2003). Making paradigmatic sense of mixed methods practice. In A. Tashakkori and Teddlie (Eds.). Handbook of mixed methods in social and behavioral research. Thousand Oarks.CA: sage, pp. 91 – 110
- Habermas, J. (1970). *Knowledge and human interests* (J. Shapiro.Trans.). London : Heinemann.
- Hammer, M. R., Milton J. Bennettb, M. J., Wisemanc, R (2003) Measuring intercultural sensitivity: The intercultural development inventory. International Journal of Intercultural Relations 27 (2003) 421–443
- Ingulsrud, John E .et al (2002), The assessment of cross-cultural experience: measuring awareness through critical text analysis. International Journal of Intercultural Relations, 2002, Vol.26(5), pp.473-491
- Jacobson, W., Sleicher, D., & Maureen, B. (1999). Portfolio assessment of intercultural competence. Journal of Intercultural Relations, 23(3), 467–492.
- Krashen, S. (1982) Newmark's "Ignorance Hypothesis" and current second language acquisition theory. Unpublished manuscript.
- Kaufman, J. C., Baer, J., & Gentile, C. A. (2004). Racial and gender differences in creativity as measured by ratings of three writing tasks. Journal of Creative Behavior, 38(1), 56–69.
- Lin, A.M.Y.(1993) "Understanding the medium of instruction in Hong Kong schools: What research approaches do we need?"
- Lin, A. M. Y. (2009). Local interpretation of global management discourses in higher education in Hong Kong: potential impact on academic culture. *Inter-Asia Cultural Studies*, 10 (2), 260-274.
- NSW(2003) Chinese syllabus www.boardofstudies.nsw.edu.au

O'Dowd, R. 2003. "Understanding 'the Other side': Intercultural Learning in a Spanish-

English e-Mail Exchange." Language Learning & Technology 7 (2): 118–144. Accessed December 6, 2011. http://llt.msu.edu/vol7num2/odowd/default.html.

- Plano Clark, V. L. (2010). The adoption and practice of mixed methods: U.S. trends in federally funded health-related research. Qualitative Inquiry, 16(6), 428-440
- Potts, D. 2005. "Pedagogy, Purpose, and the Second Language Learner in On-line Communities." The Canadian Modern Language Review 62 (1): 137–160.
- Vygotsky, L.S.(1987). Mind in society: The development of higher psychological rocesses (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds. & Trans.). Cambridge, MA: Harvard University Press.
- Yancey, K. B (1999). Looking back as we look forward: Historicizing writing assessment. College Composition and communication, 50, 483-503
- Yang, F.S. & Chen, Y. (2004). Hanban News. Retrieved from http://english.hanban.org/article/2014-12/11/content_566157.htm

Yin, R.K. (2002). *Case Study Research: Design and Methods*, *3rd Edition*. New York: Sage.