A Developmental Study of Instructional Design Model for Continuous Reflection in Cultural Diversity Education

Cheolil Lim
Sunhee Kim
Soyoung Choi
Sungwook Kim
Jungeun Park
Hyoeun Lee
Hyeonsu Kim

Department of Education, Seoul National University
599 Gwanak-ro, Gwanak-gu, Seoul, 151-748, Korea

Two descriptors for use in the index: Cheolil Lim & Sungwook Kim

Abstract

The purpose of the study is to develop an instructional design model to support learners' continuous reflection during the learning process in cultural diversity education. Current instructional models for cultural diversity education are inappropriately utilized in school settings due to the lack of specific guidelines for instructors' and learners' activities and their insufficient explanation and usability. To enhance cultural sensibility and value internalization for cultural diversity education, learners' continuous reflection during the learning process should be integrated in the instructional design process. Using the design-based research methodology, this study first derived a draft of instructional design principles from multicultural education literature review and monitoring classes, then suggested an instructional design model with the cooperation from expert instructional designers and field experts (teachers), and finally developed a practical instructional model through gradual model elaboration process. The features of the developed instructional design model are as follows. First, it presents specific learning stages and activity elements for cultural diversity education. Second, it provides different types of reflection supporting tools that an instructor can use for each learning stage in learner-centered design as well as specific examples of usages. Third, the developed model considers not only the cognitive aspect of learners, but also the affective one, suggesting instructional design elements to consider in order to cultivate attitudes or values.

Introduction

Needs for the multicultural or cultural diversity education have been heightened as the Korean society becomes a multicultural society. The definition of cultural diversity refers to various methods in which a culture of a group or society is expressed (UNESCO, 2008) and it is an approach to minimize the structural discrimination and socio-economical separation based on ethnicity, class, gender, religion, disability (Lee, Joo, & Kim, 2013). Banks and Banks (2010) stated that the goal of the cultural diversity education is for all students to acquire knowledge, attitude, skills to communicate, negotiate meaning and interact with various groups of people. In order to guarantee the effectiveness of multicultural education, every students should be offered with continuous multicultural education (Martorella, & Beal, 2002; Parker, 2001; Savage, & Armstrong, 2000).
However, currently available programs intend to help students in multicultural family adapt in the Korean society. The limited scope of multicultural educational locus in current programs have been criticized for its focus on a group of minority to be adapted into a society (Cho et al, 2010; Hwang, & Yang, 2008; Park, 2011). In this context, interests in multicultural education which notes a parallel human relationship and power relationship between majority and minority have been increased recently in Korea (Kang, & Jang, 2009; Lee et al, 2013; Lim et al, 2012).

On the other hand, it is rare to find an instructional design model that has detailed activity stages or guidelines that an instructional designer can refer to when designing cultural diversity education. The current lesson models for cultural diversity education have activities or stage names that are too abstract or general for teachers to follow through. Moreover, they are not appropriately utilized in school due to insufficient guidelines for instructor and students’ activities in each lesson stage and lack of explanation or usefulness (Eun, 2009; Kang, & Jang, 2009; Kim, & Kim, 2009). And, focus of cultural diversity education includes not only cognitive aspects of learning but also learners’ attitude and value formation. To improve learners’ attitude, value and interests, it has been suggested that organizing lessons around learners’ activities is useful (Heo, 2010; Kim, & Jin, 2004; Kwon, 2004; Lintner, 2005; Scott, 1999). However, activity-centered lesson does not guarantee to achieve the intended goals. Despite the fact that activity-centered learning is significant in several aspects, students just focus on doing specific activity itself, which results in different learning outcomes (Kim, & Jin, 2004).

This is due to the absence of reflective learning, where a learner forms his or her consciousness and behavior through monitoring ones status and learning situation (Choi, & Lee, 2003; Duffy, Lowyck, Jonassen, & Welsh, 1993). Reflection has been proved to be a success factor in the learning process, but research on facilitating reflection has been done mainly in the web environment (Chung, 2007; Kim, & Kim 2002; Park, & Woo, 1999) and there has not been enough studies regarding strategies or tools that can support reflection in the face to face learning environment.

Generally, the reflection activities are in the journal writing format implemented at the end of a series of lessons or in the form of reminiscing previous learning contents. Current methods require learner’s memory which may result in erroneous information, and it may not be less effective in terms of promptness. It is also ineffective in terms of value internalization method. Therefore, research guidelines for instruction design is needed to help learners to continuously reflect their learning process.

The aim of this study is, therefore, to develop a continuous-reflection-centered instructional design models for cultural diversity education which enables learners to reflect continuously during the learning process in order to internalize the core value of culture diversity.

Theoretical Backgrounds

Multicultural Education and Cultural Diversity Education

Recently, due to the influx of foreign workers and increase in international marriage, the Korean society is becoming a multicultural society by having ethnically and racially diverse people. Therefore, fostering members of society to respond sensitively in multicultural setting to recognize and respect differences has become an important issue in education. To fulfill an ideal society through cultural co-existence and positive interaction, the revised curriculum in 2007 reflected multicultural education (Hong, 2012). However, multicultural education currently implemented has been criticized for its focus in the assimilative educational contents which target minority groups (Hwang, & Yang, 2008; Kang, 2008). Current education offers only methods to integrate children from multicultural family or minority into the Korean society by offering training programs for Korean language and Korean cultural understanding as adaptive education (Koo, Park, & Seol, 2010).

Due to the emergence of critiques, narrow scope of multiculturalism has been transcended and the necessity of cultural diversity education is all the more emphasized. The definition of cultural diversity refers to various methods in which a culture of a group or society is expressed (UNESCO, 2008), and it indicates the cultural difference between people in terms of language, clothes, the ways to form traditional society, concepts regarding ethics and religion and interaction. Cultural diversity awareness not only enables one to understand other cultural groups but also experience internal changes such as attitude or value to acquire open attitudes and flexible mindset toward other cultural groups. That is, cultural diversity education is to foster abilities to acquire sensitivity regarding different life styles, world views, and cultures and to participate in the conversation between different groups and countries (Banks & Banks, 2010).
Instructional Design Model for Cultural Diversity Education and Reflection

The existing multicultural education programs have been mostly implemented by specifying multicultural education subjects in terms of curriculum content, subject matter, and teaching-learning methods or by teaching understanding of other cultures in social education. Teachers recognize the importance and necessity of multicultural education but have difficulties in its implementation because they’re not provided specific guidelines to conduct a lesson (Choi, & Mo, 2007; Park, Sung, & Cho, 2008). According to Cho et al. (2010), teachers are not even certain that the school-provided multicultural education activities are valid and they expect professional organizations to provide education programs and materials.

For an effective lesson, it matters how the teacher makes use of the ample teaching-learning materials. This ensures the necessity of building an instructional design model for cultural diversity education. The following Table 1 includes the current multicultural education lesson models.

Table 1. The Existing Multicultural Education Lesson Model

<table>
<thead>
<tr>
<th>Preceding Research</th>
<th>Multicultural Lesson Model Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kang, &amp; Jang (2009)</td>
<td>① Suggest Pluralism Task ② Investigate and Understand Pluralism Task ③ Secure Plural Perspective ④ Cooperatively Adjust Plural Perspective and Set Temporary Solution ⑤ Present and Evaluate ⑥ Reflect on Decision Making Process</td>
</tr>
<tr>
<td>Kim, &amp; Kim (2009)</td>
<td>① Suggest Problem of Conflict ② Recognize Multi-culture Coexistence ③ Resolve Cultural Prejudice ④ Practice Anti-prejudice Activity ⑤ Internalize Value</td>
</tr>
<tr>
<td>Jho, &amp; Park (2009)</td>
<td>① Unfamiliarize Socio-cultural Myth ② Looking at World from Others’ Perspectives ③ Write and Present Inter-cultural Material ④ Encourage and Seek Plan for Practice</td>
</tr>
<tr>
<td>Eun (2009)</td>
<td>① Admit Cultural Toadyism or Ethno Cultural Centrism ② Recognize Difference Between Own Culture and Other Culture ③ Understand and Respect Own Culture and Other Culture ④ Reflect on Own Culture and Other Culture ⑤ Handle Multicultural Problem and Conflict</td>
</tr>
<tr>
<td>Park (2006)</td>
<td>① Reveal Child’s Prejudice ② Understand Child Literature Content ③ Correct Misunderstandings Leading to Prejudice ④ Explore Prejudice Related Emotions ⑤ Post Activity and Wrap Up</td>
</tr>
<tr>
<td>Han (2006)</td>
<td>① Watch Movies ② Check Movie Content ③ Analyze Problems and Question Period ④ Debate</td>
</tr>
</tbody>
</table>

These instruction models suggest different approaching methods depending on subject matter, goal, and learner level; or they suggest teaching-learning methods that utilize particular media. These methods are different, but in general, they go through the process of recognizing, respecting and internalizing the cultural difference. However, the explanation of each stage’s activity does not provide specific guidelines that the teacher can refer to when he or she plans the lesson. Each stage should clearly state the teacher and learner’s roles and activities.

Also, in cultural diversity education, the lesson is organized focusing on the learner’s activity, and it leads the learners to understand concepts and internalize values through concrete experiences. The learner’s reflection, in this context, is proposed to be an important factor in the successful learning. When experiences are not connected to the reflection, learners tend to be absorbed in the activity or behavior itself, and this makes it difficult to achieve the intended goals (Kim, & Jin, 2004). Learner’s reflection is also included in the existing multicultural education instruction models, but the reflection process is just limited to the reflection journal writing at the end of each lesson period. The reflection done at the end of the lesson is less effective in terms of promptness such as reflecting in the middle of the lesson and being able to reflect the result of the reflection in the following behavior or activity. This means that it is needed that learners guided to reflect as the lesson persists (Chung, 2007).

The importance of experiences and reflection through learners’ activities is emphasized in the Kolb (1984)’s experiential learning theory. Kolb (1984) defined experiential learning as a learning process that brings the learner’s behavior change and growth as they analytically observe and reflect on the concrete experiences and from these experiences, deducing abstract conceptualizing, i.e. principles that can be generalized regarding behaviors, and based on this, trying new behaviors and trying to experience new things with new points of view. In experiential learning, the learning process is cyclical and is progressed gradually. The learners’ active participation in concrete
experiences and their self-reflection towards the experiences are important in the learning process. Learning takes place in the process of integrating experience, concept, observation and behavior. Kolb’s experiential learning theory model is cyclical format of four stages: ‘concrete experience,’ ‘reflective observation,’ ‘abstract conceptualizing,’ and ‘active experiment.’ Kolb (1984)’s experiential learning theory may work as a theoretical frame of an instruction design model for cultural diversity that needs inter-cultural experience and constant reflection in that it emphasizes activities and reflections of learners.

Reflection Supporting Tools

Schön(1983, 1987) suggested two types of reflection. One is reflection in action which is about the process of learning, and the other is reflection on action which is about the result of learning. Learners monitor their thought and learning behavior by reflecting their learning process. This process is focusing on realistic tasks, asking oneself whether a series of activities to solve the tasks are conducted in a reasonable way and finding alternative solution and ruminating on the result of it (Dewey, 1933). Discussions on types of reflections imply that both process and result of learning should be reflected and through the whole process of learning, continuous reflection is needed. In addition, reflection is not a skill that is improved naturally but it is an acquirable skill through learning (Kim, 2012). When teachers provide learners with opportunities for reflection and encourage them and provide regular feedbacks to reinforce reflective learning, learners develop the ability to learn from their experience (Lowe, Rappolt, Jaglal, & Macdonald, 2007). Accordingly, research on methods how in which the teachers support the learners’ reflection is important subject to study (Sawyer, 2006).

The literatures on reflective thinking introduced the effect of various learning tools that could support reflective thinking. The typical tools for stimulating reflective thinking are reflection journal, concept map, reflection questions, and checklists (Song, 2009). Reflection journal asks learners to write a journal by organizing the questions and concerns which came up in their minds during learning. By writing a journal, the learners are not stopped at reflecting with their head but they are provided with opportunities to evaluate their learning experience deeply by stating their thoughts (Boud, 2001; Boud, Keogh, & Walker, 1985; Chung, 2003). Andrusyszyn and Davie(1997) reported the effectiveness of interactive journal writing in facilitating reflection in their study of reflection facilitation in computer mediated learning environment.

Concept map was developed by Novak and Gowin(1984), and it means pictures using nodes and links to express a propositional statement. Concept map has structural figures and it shows concepts which are the relationship between ideas and knowledge in an organized manner (Jonassen, Grabowski, 1993). Accordingly, concept map as visual symbol helps learner recognize the information quick and easy way and see through the whole structure of related concepts beyond understanding a specific concept. Thus, concept map can be flexible classroom tool to assess the degree of understating. In addition, Kinchin and his colleagues (2000) reported after qualitatively analyzing the usefulness of concept map, it plays positive role to integrated newly learned concept with previous knowledge.

Reflection questions are the easiest tool for teachers to utilize in their classroom. Students are able to ruminate on their learning objectives, process of learning, and the content of learning through reflection questions. Chung (2007) encouraged students to fill the worksheets and to use reflective questions time to time while performing activities in each step in problem solving task. In this research, worksheets of each step are proven to promote team process of problem solving thus helping students’ performing PBL activities. However, the use of reflective question was quite inactive because appropriate reflective questions suitable to the level of students were not offered. Therefore, the teachers should lead the classroom naturally and use appropriate questions considering the learning contents and the level of students (King, 1994).

Checklist is a tool for students to monitor their process of learning (Burke, 2009). It is a way of making students record the frequencies of a specific behavior or check whenever this behavior appears after previously designating items they want to observe (Ahn, 1997). However, when students evaluate their process of learning in the classroom, the questions should be simple and easy to identify otherwise they might interfere with the flow of lecture (Conner, 1991).

In this research, the specific principles to utilize reflection journal, concept map, checklist, and reflection questions as supporting tools for continuous reflection in multicultural education are suggested and improved.
Methods

Design-Based Research

Design-Based Research is about learning in the context which is conducted through recursive and systematic designing and research process on teaching strategies and tools (Design-Based Research Collective, 2003). Design-Based Research is usually dependent on the context of teaching and learning, and a great part is done in the real classroom for improvement (Sloane & Gorard, 2003). Accordingly, in solving the complex problems of teaching environment, practical solutions can be suggested to be rooted in the theories (Barab & Squire, 2004; Brown, 1992).

In this paper, researchers try to develop an optimal instructional design model for multicultural education though Design-Based Research. The suggested model can provide teachers with practical principles for designing in the context of classroom environment. Teachers could be provided with the information about the steps and stages to lead students to effectively acquire the values and the meaning of cultural diversity and how the learning activities in each steps be arranged. They can, also, get a great deal of ideas of supporting strategies for students to wholly understand of the values and the meaning of what teachers provide. Recursive implementation and evaluation made suggested model optimal.

Research Procedure

The initial model including steps and activities was developed through reviewing previously suggested multicultural education models. This initial model was revised through the feedback by the instructional design experts and the field teachers, and its applicability of revised model was verified through applying it to the real classroom environment.

The development of the initial model

The initial model was developed including steps and specific principles based on the literature review. Literature review was conducted in the area of present models for multicultural education (Banks, 2007; Eun, 2009; Han, 2006; Jho, & Park, 2009; Kang, & Jang, 2009; Kim, & Kim, 2009; Park, 2006) to construct the steps and stages of the optimal instructional model. An initial instructional design model was developed with the steps of introduction-development-closing.

In addition, based on the experiential learning model of Kolb (1984), researchers classified the multicultural education classroom activities into four steps: concrete experience, reflective observation, abstract conceptualization, and active experiment and determined their purposes and necessity. In order to develop tools and strategies to lead and support learner’s continuous reflection during the class, related literature (Andrusyszyn & Davie, 1997; Boud, 2001; Boud, Keogh, & Walker, 1985; Burke, 2009; Chung, 2003; Chung, 2007; Kinchin, Hay, & Adams, 2000; Kolb, 1984; Novak & Gowin, 1984; Song, 2009) were analyzed. Reflection journals, concept map, reflection questioning, and checklist were suggested as useful supporting tools for reflection by the literature review.

The development of the second model

Two instructional design experts who have experience as teachers and the one social studies expert who had taught at teachers' college reviewed the initial model suggested their opinions through individual face-to-face interview. Their opinions and suggestions were analyzed and developed into recommendations for improvement. Each expert had an interview with two researchers. The interviews were conducted focusing on validity based on the previous literatures and recommendations for improvement about the suggested model. The interviews were conducted in a semi-organized way, and one interviewer mainly asked questions and the other one instantly record and transcribed conversations with laptop. The contents of recorded conversations were classified into four types of information: theoretical background which the suggested model root in, opinions about the model in general, and the activities in each step. Recommendations for improvement were identified and coded. Considering the purposes of development and applicability, the experts’ suggestions were divided into the ones which can be applied and the others which cannot be after three times of discussion for decision making. As a result, the initial model was revised.
The development of the third model

To increase the possibility of utilizing the model in schools, the model was tested for use by eight field teachers who have different years of teaching experiences. The field teachers were asked to especially reflect on the expected difficulties if they use the suggested model to plan their class. Three parts were especially stressed when the teachers reviewed the model. First, are the names of teach steps and activities appropriate? Second, are the activities of each step applicable? And are the application plan of reflection supporting tools suitable? Third, is it possible to design various multicultural education when following the suggested model? The teachers’ opinions were classified according to three questions. Just like the first revision, the suggestions were applied to the next version of model. The second model was refined based on the participants’ feedback and the final model was developed.

The final model

Real instructions were conducted by two teachers separately to see how the model is realized in the classroom. A researcher observed the instruction and conducted an interview with the teacher and the students. The teachers were mainly asked if there were any difficulties planning and using the reflection supporting tools and how the students responded. Four students had a group interview from each class, so eight students in total had interview and suggested their ideas. They were asked difficulties, advantages and any general ideas related to the reflection supporting tools they used in the classroom. The collected ideas and suggestions from the teachers and the students were considered when revising the explanations of reflection supporting tools and the final model was developed upon them.

Results

The Development of the Initial Model

The instructional design model for continuous reflection in cultural diversity education was designed by considering cultural diversity education and reflective thinking. In this study, the types of activities were extracted by analyzing prior multicultural education model and its instructional goals. The initial instructional model like Figure 1 was developed, connecting the process with four major steps from Kolb’s theory of learning by experience.

![Figure 1. The first instructional design model for continuous reflection in cultural diversity education](image-url)
The effective reflection supporting methods for each step are like the follow. In the concrete experience step, it consists of two activities, ‘realizing cultural situation’ and ‘checking the task.’ The main process of this step is identifying the various cultural differences or situations in our lives and recognizing the learning contents for the class. The applicable reflection supporting methods in this step is ‘questioning’. It focuses on checking whether learners understand the main points of the learning contents and helps learners to recognize the learning goals.

The reflective observation step includes a process of solving problems relating to the learning task from the previous step, concrete experience. First of all, learners find out the cultural facts in the situation, shown in the concrete experience step. From the cultural situation, they research how the differences appear in each situation, and study reasons of the similarities and differences among other cultures. Checklist and questioning is suggested to prevent learners from absorbing unconsciously into activities while forgetting its purpose.

In the third step, abstract conceptualization, identify the cultural similarities and differences, and connect the cultural elements from the lesson logically to from concept of the culture. The concept map can be an effective supporting method in this step. It can be used for activities to help learners understand how the various concepts can be connected, showing the similarities and differences.

In the last step of the model, learners extend the concept of culture by applying the conceptualized learning contents into different situation. From the process, they deviate from adopting fragmentary knowledge from the cultural situation, understand culture as life style of human kind, and internalize themselves to respect different style of living and expression mode. Furthermore, it makes learners apply those attitudes and perception to real life. To support completion of the learning process, students write a reflection journal about things they find out and want to know more from the class. It can be used to arrange the contents cognitively and affectively they learned.

The Development of the Second Model

The initial model was reviewed by expert for validity, availability, understandability, and universality of the model. Their opinions which are reflected in second model are like the followings. First, provide efficient explanation for the instructional model. Second, guidelines for the reflection supporting strategies and tools should be explained concretely. Even though the model is valid as an instructional model for cultural diversity education, it should contain more detailed guidelines for teachers so that they can use the model in the classes. Those suggestions throughout decision-making process among researchers applied into the second model like Figure 2.

The form of the model and designation of each level is revised in second model. In the revised model, it separates subjects to learners and instructors and suggests major reflection supporting tool separately for each step. The names of each level from Kolb’s model of learning by experience are changed to the main activity in each step such as ‘recognizing cultural situation’, ‘exploring cultural information’, ‘conceptualizing cultural situation’, ‘extending cultural experience.’ In addition, the last activity, extending experience, suggested in 10th step is eliminated since it seems to be similar to the extending cultural experience for internalization of other culture. Also, to make the terms clear, we changed ‘question’ to ‘reflection question’ in reflection supporting tool. For the detailed guides, we revised ‘collecting cultural information’ to ‘finding reasons for cultural differences and similarities.’ Reflection supporting tools is revised only in checklist by modifying and supplementing questions and form of the checklist. The types of questions were changed from five statements to O,X checking and elaborated the reflection questions considering each step, and eliminated repeated questions.
The Development of the Third Model

The second model was reviewed by 8 experts working in educational field: six of them majored in cultural diversity education and the rest has master’s degree in pedagogy. The field experts referred about the activities, instructors’ role, types of reflection supporting tools, and applications. Since activities suggested in model seem to be weighted to cognitive aspect, it needs to include more elements from affective, behavioral aspects.

In addition, the opportunities to present about the learners’ feelings and thoughts after the activities should be contained in the steps. Majoring in cultural diversity education, some experts answered the model should support more effectively for general teachers. They suggested many guide materials such as various examples, checklist for instructor, etc. The necessity of revising terms to reveal the meanings of activities more clearly was also suggested.

The opinions about checklist were the major issue in reflection supporting tool. The terms should be revised for students’ understandings and the contents should reflect aspects of cultural diversity education. Besides, using the checklist in the middle of the class should disturb the flow of the learning and it might be ineffective. There was a comment about the standardizing form of the checklist. While making concept map, the Venn diagram is suggested since the learners should recognize the similarities and differences of cultures during the activity.

Considering those suggestions, we revised terms and content of the reflection supporting tools, added more detailed material explaining the model, maintaining the form of the second model.

The Development of the Final Model

The third revised model received usability test, applied in elementary school classes. We confirmed some suggestion to revise the model by interviewing teachers who planned and conducted class with the model and students from the classes. One of the teachers suggested the model needs to give plenty scope for teachers, which they can elastically use the model in planning classes. The other teacher referred learners should have some opportunities to learn about the process of making concept map and checklist which are reflection supporting tool.

Most students mentioned that reflection supporting activities like questioning, concept map, checklist were helpful for their learning, since it guides what to do in learning process. Meanwhile, it is confirmed that even though reflection supporting tools can be applied to all steps, teachers assumed the tools as an absolute. From this result, we improved the model like Figure 3, combining reflection supporting tools together for all steps and filled the first letter from suggested steps in brackets. Moreover, the development of the model is completed suggesting the guide for teachers using the model by the context and educational environment and reflection supporting tools (Table 2, Table 3, Figure 4, Table 4).
Table 2. Example of reflection questions

<table>
<thead>
<tr>
<th>Step</th>
<th>Reflection Questions</th>
</tr>
</thead>
</table>
| Apprehension of Cultural Situation | • What is it about that I experienced (saw, heard)?  
                                 | • What is fact suggested in that I experienced (saw, heard)?  
                                 | • What is today’s lesson?                                                               |
| Exploring of Cultural Information | • What is the fact that I already know relating to the situation I experienced (saw, heard)?  
                                 | • What are the similarities between cultural facts I already know and the scene I experienced today?  
                                 | • What are the differences between cultural facts I already know and the scene I experienced today?  
                                 | • What is the reason of the difference between cultural facts I already know and the scene I experienced today? |
| Conceptualization of Cultural Relation | • What are the relations between collected information?  
                                         | • How can the collected information be united and organized?                           |
| Extension of Cultural Experience | • How can the learned facts apply to other cultural situation?                           
                                         | • What kind of change will be brought in my cultural perspective and behavior after today’s class?  
                                         | • (in other cultural scenes) What will I do? What kind of happening is expected?         |

Table 3. Example of reflection checklist

<table>
<thead>
<tr>
<th>Step</th>
<th>Reflection Check-list Questions</th>
</tr>
</thead>
</table>
| Apprehension of Cultural Situation | • Did I see, listen, react actively on the situation given in the class?  
                                         | • Do I know well about the situation I experienced now?                          |
| Exploring of Cultural Information | • Did I fully examine the situation to find the meanings of it?  
                                         | • Did I listen carefully to others observing situations around?                  |
                                         | • Am I collecting information relating to the learning task?                    |
                                         | • Is the collected information important and reliable?                         |
                                         | • Do I know what is additional information needed to understand the situation deeply? |
Discussion and Conclusions

This research focused on methods to engage students in continuous reflection during learning process by developing instruction design model for cultural diversity education. The basis of this research is attributed from prior researches, which insisted that classes should be student centered to improve students’ interest and to form their attitudes or values (Heo, 2010; Kim, & Jin, 2004; Kwon, 2004; Lintner, 2005; Scott, 1999), and that the reflective self study is important in activity-centered classes (Choi, & Lee, 2003; Duffy, Lowyck, Jonassen, & Welsh, 1993).

The discussion of developing instructional model for cultural diversity education is extended to three aspects as the followings. First, this research determined concrete learning steps and activities for cultural diversity education. The final instructional model is fulfilling the actual needs from education field by suggesting prescriptive form of concrete steps and activities for instructor and learners in cultural diversity education. Second, we suggested detailed examples of reflection supporting tools and of utilization in each step for student-centered classes. This research guided some reflection supporting tools for each step and method to provoke learners’ reflection in activity-centered class. Third, the specific instructional design elements to consider for affective domain such as learners’ attitude or value have been suggested along with instructional design model. Cultural diversity education is a cognitive, affective, behavioral education to make students acknowledge and respect value from different cultures, and live together.
The instructional design model contrived cognitive learning by step of apprehending cultural situation, exploring cultural information, and conceptualizing the situation. Besides, as experiencing diverse cultures, it made behavioral changes possible, by discovering reasons for cultural difference and similarity, and applying conceptualized cultural relations in other situation. Lastly, the instructional design model is suggested for changes in affective area relating to learners’ attitude and value by accepted cultural knowledge from internalization step.

Meanwhile, some suggestions for effective application of the model, from findings in developing and applying process, are like the followings. First, to implement the cultural diversity education, instructors should use time-block or aware of other methods for flexible class management. Although the example of the class materials provided in this study is based on quantities of two classes (90 minutes), the actual classes was conducted in one class (40 minutes), considering the actual school environment. To ensure students play a leading role in exploring cultural information, conceptualizing its relation, and internalizing it, it takes a certain length of time. Thus, the key is to insure plenty time to induce learners’ deep thinking and reflection for internalizing value and changing attitudes in student-centered learning. Second, as using complicated reflection supporting tools would disturb the flow of class, it is important for instructors and learners to use simple and familiar reflection tool. To accomplish learning goals in the class without immersing oneself in activities, the reflection is suggested during class. However, the flow is rather distracted, when the time designed for reflection is too extended or complex tools are used in reflection process.

Therefore, using simple and easy form of reflection tools to remind learning goals and meaning of activities is essential to maintain flow of the class. Third, various example should be suggested together for practical use of the model. Those who are not only familiar with concept of cultural diversity but also making effort to support continuous reflection need to spend much more time and effort to prepare. Indeed, some participants in this research who majored in multicultural education or are interested in cultural diversity education showed much faster applicability and understanding than ordinary teachers, who suffered understanding the model and preparing materials for classes.

Reference


