A Study on the Development of an Educational UCC Model for Pre-Service Early Childhood Teachers at the University

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Abstract

The purpose of this research is to develop an educational UCC model for pre-service early childhood teachers. For this, firstly, this research devised the Educational UCC Model based on blended learning through literacy research and case studies in order to develop this program. Secondly, we corrected and supplemented the first draft model through formative evaluation. Thirdly, we applied the modified model into the educational field, and drew out the strong points and weak points of the model and came up with the final model. In order to draw out the systematic educational UCC model, we examined the degree of the students’ perception on the concept of blended learning and UCC, the process and the methods for making use of UCC, and applied the model into the field, and obtained the result. The research revealed that the model helped students conduct each process and devise a strategy of the whole process.

Key words: UCC, pre-service early childhood teachers, Blended learning

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I. Introduction

Today, basic educational tools such as video, TV, computer, UCC (User Created Contents) are being used. Among them, UCC, the individual centered web environmental tool, changed the role of the user from the receiver to producer, and the UCC is actively being used in the educational field. Especially, UCC is represented as the new cultural phenomenon that the users could be the producer and the consumer by making diverse videos using the simple video editing software that is easy to produce, it has been evaluated positively (Kim, 2007).

UCC users have been changed as more active and conative beings who are not the inactive beings but are the producers and distributors of information, as well as being consumers of information (Cheon & Yoon, 2007; M. W. Choi, 2007). This change requires a role that is more active and conative knowledge producer who can make, process, and construct the information by themselves as needed, reproduce new information reflecting others' opinion on, not just have the learners simply provide the information, and accept it as inactive beings (Kang, 2007). So to say, UCC is named as 'user generated contents' focusing on creating and producing (Hwang & Sung, 2006), UCC learners are the productive learners who can produce and create their own knowledge as needed (Park, Kim, & Kang, 2010), and have the contents created and recreated utilizing with various multimedia.

UCC learners can develop the ability to cope with the information society as learners upload their work on blogs and utilize it during the course with active and fun activities, and finally make the learners have interest, participation and positive self expression and sharing. With this perspective, UCC has the educational effectiveness which encourages learners' participation in the practical learning activities that is the center of the creation and production as they express their thinking actively and share the thought, and make the creative contents in the cyber space. Therefore this effective educational UCC has the characteristics of the diverse multimedia that is supplied with
A Study on the Development of an Educational UCC Model

audio materials like subtitle, text, sound and explanation, that the teacher and learner made or edited by themselves, in order to use in the instructional learning activities.

On the other hand, UCC is the subject of explosive concern in the field of economics and linguistics as well (Lee & Lim, 2007). Research has been going on in various social areas and educational field (Kang, 2007; Kim, 2009; Jung, 2007; M. W. Choi, 2007). UCC has high visual learning effectiveness on the aspect of its' effectiveness of the content delivery for the sensible and vigorous materials, and new and various self-expression acting through the UCC (Kook, 2003).

In spite of this educational effectiveness, the research on UCC has encountered difficulties in finding proper videos that fit the educational purpose and content, and editing according to the educational purpose and content as well, so the utilization of the video materials is very limited (We & Kim, 2006), the motivation of the usage of UCC is closely related with the pursuit of the interest including self expression rather than the profit of collecting information (Kang, 2009; M. J. Choi, 2007). Most researches on UCC explain the types of new communication, but research on how to process the instructional learning activities related to the production of UCC is still needed (Kang & Kim, 2009; Kim & Jung, 2009). In the field of pre-service early childhood in particular, the research on the recognition and utilization method related to the computer education for teachers is the most conducted, but the experimental research on the development of UCC has been totally absent (Kang, 2003; Kim, 2007; Kim & Kim, 2003).

On the other hand, for enhancing problem solving ability, blended learning that maximizes the interaction among the learners and teacher, and the content using online and offline environment has been emphasized (Lee, 2007). Blended learning is the learning environment integrating the strong points of face to face classroom learning and online learning. The online environment makes it available to have the various activities that could overcome the limitation of time and space offline, and it also makes it possible to supply more time and space, learning
convenience, learning materials, and an instructors. Therefore, college courses can introduce blended learning as an effective teaching and learning method, and UCC instructional learning activities based on blended learning will be needed for pre-service early childhood teachers because there has been highly efficient results on the ability of utilization of UCC and the experience of the online system (Lim, 2007).

If UCC is utilized in blended learning, effectiveness could be enhanced. Firstly, learners can become more active participants (Lee & Jung, 2008) and more productive learners (Park, Kim, & Kang, 2010) producing learning materials in collaborative ways. Secondly, the learners can be expected to communicate for solving tasks interact and produce the organization as they assign tasks to each other, create the satisfying results in various ways within the due date, and upload it on the online site. Namely, the communication for solving the task emphasizes interactive cooperation (Seong, 2002), it makes it possible to have the students get evaluated and solve constructive conflict in the environment of trust and mutual respect (Levi & Cadiz, 1998). Thirdly, blended learning is accessible for learners to share team tasks and learning experience as learners open the learning materials and assignments in the flexible organization (Jung & Youn, 2007). It can minimize the errors that could happen in the performance of task. Therefore, it is meaningful to develop an educational UCC model for the pre-service early childhood teachers in the blended learning environment.

Accordingly, the purpose of this research is to develop an educational UCC model based on blended learning for the pre-service early childhood teachers. The specific tasks of this research are as follows.

1. The first draft of educational UCC model based on blended learning will be deducted.
2. And then, through the formative evaluation by specialists, the first draft model will be modified.
3. The modified model will be applied in the college course and the strong points and the weak points of the model will be deducted, and finally the final model will be drawn.
II. Theoretical Background

A. Educational UCC

UCC (User Created Contents) is the products that users made by themselves, and UCC includes diverse contents like video, text, photos, and etc (Daum, 2010). UCC becomes the center of the production of contents and very popular for users who participate in a new internet environment. In web2.0, anybody can produce the information and knowledge and share with others without the monopoly of possession of information and knowledge. The role of users of web2.0 were changed from receiver to producer, and web2.0 effects onto the educational field so that the text, photo, and video created by individual were posted, shared, and then the information and knowledge has been spread to others (Ham, 2008).

UCC requires more active and positive knowledge producers who do not just receive the knowledge and accept it, but act as a manufacture or constructor who makes knowledge by themselves, and if needed, reflects the opinion of others and remakes new information (Kang, 2007). In regards to using UCC educationally, it is needed to use and produce not only the text knowledge but also various multimedia like video, sound, etc.

Like this, UCC learning activities educationally has characteristics such as active participation, communication for solving tasks, and sharing products. First, UCC learning supplies abundant learning resources and facilitates the active participation of learners. As Lee & Jung (2008) insisted, class participation could be increased as the learners make their own learning materials. Second, UCC learning makes communication available for solving tasks as they produce the resources by themselves and post it on the web in many different ways. Namely, the communication for solving tasks emphasizes communication among the learners and interactive collaboration (Seong, 2002) as they share the posted assignment and conduct peer reciprocity evaluation (Lee & Jung, 2008). Third, UCC
learning allows learners to share their assignments, so the learners can get access to learning materials, and this open resources help them make less errors during the learning process (Jung & Youn, 2007).

On the other hands, the educational paradigm shift has made the distance education and internet learning a part of life. In this aspect, the utilizing ability of software is required for early childhood pre-service teachers and it should be successfully integrated and utilized in the curriculum of early childhood education (Kim & Kim, 2003). The experience of observing computer utilizing model, consistent scholarship, etc. in teacher training courses are the essential elements (Epstein, 1993), but the ability of utilizing the computer for early childhood pre-service teachers is very insufficient (Kang, 2003). Also, research on how to process the instructional learning activities related to UCC production for early childhood pre-service teachers is in great need. This indication shows the need for research on systematic educational UCC development that helps early childhood pre-service teachers in the training center increase the abilities of planning, designing, editing, using and managing multimedia. Therefore, the purpose of this research is to develop a systematical educational UCC model not only for knowledge acquisition, but also for integrating knowledge from various field through collaborating and sharing with others as well as creating knowledge information.

B. Instructional Design Model and Blended Learning

Instructional design focuses on the means for establishing the objectives for the learners rather than the result of the work (Choi et al, 2010), and presenting the right or wrong situations for using the means and methods supporting and facilitating learning. The instructional design model is not only the integrated system, but also the means to explain and predict a phenomenon (Reigeluth, 1999). Through the instructional design model, the problem of the instructional situation could be well understood and could suggest the effective solution (Korean
Society for Educational Technology, 2005). In order to develop an instructional design model, generally the instructional designers analyze advanced research, general common sense, and practical experience (reflection) through the intuition of the theorist (Reigeluth, 1999). Instructional design model also belongs to this category.

Instructional learning model means the system of simplifying explanation or structure of complex instructional learning process or phenomenon focusing on specific elements, the framework of planning the course (Kim, 1997). In other words, Instructional learning model should suggest the content, people, material, methods, and conditions to make learning happen (Lee, 2000).

Blended learning has been defined in different ways, but no mutually agreed exact definition exists. It is not just online and offline combined learning environment, but it expands its conception and area up to the instructional strategy for drawing out maximum learning effectiveness through combining various learning elements according to the content and the purpose of the course, learning objectives, learning methods, time and space, learning activities, learning media, learning experience, interaction ways, and so on (Jung, 2007; Fox, 2001; Masie, 2002). Synthesizing various advanced research on blended learning, Lee (2007) suggested the following three characteristics of blended learning. At first, online and offline is combined, this all-inclusive learning is the premise of blended learning. Second, this integration should be made by the way of scientific learning approach using the effectiveness, efficiency, and attractiveness. Third, it is the learner centered approach increasing the learning accessibility, convenience, flexibility and etc. Therefore, blended learning made it possible to approach various methods that could satisfy diverse learners.

Accordingly, this research intends to develop an educational UCC model based on blended learning, combining and utilizing online and offline learning strategies to maximize the effectiveness of learning.
III. Research Method

This research has been performed to develop an educational UCC model based on blended learning in University. At first, the process of the model was analyzed through literature research and case research, and then core learning activities were drawn out, and the first draft of the model was designed. In order to find out the strong points and the improvement of the model, a FGI (Focus Group Interview) was implemented by a specialist in formative evaluation, then the model was applied in the field and the implication of the model was explored.

This research processed using various methods such as design research, practical research, formative research, etc., and it could be used to develop and improve diagnostic theory, models, or the real process of the course (Richey, Klein, & Nelson, 2004). Development research is a systematic study of design, development and evaluation processes with the aim of establishing an empirical basis for the creation of instructional and non-instructional products and tools and new or enhanced models that govern their development (Richey & Klein, 2007). Also, it was developed through the process of analyzation, design, development, implementation, and evaluation based on the process of the ADDIE model. To confirm the validity of the output results, the method of triangulation was used.

A. Literature Research

This research analyzed material centered on pre-service early childhood teachers, UCC, blended learning, resources from the National Assembly library, public library, etc., and selected data focusing on the highly equated literature among articles and separate volumes domestically and internationally. Literature analysis was implemented by using the method of the content analysis that draws out a structural elements of pre-service early childhood teachers, UCC, and blended learning (Kim, 1996; Park, 2001; Hwang, 1998).

Namely, core idea, process of the model, and core learning
activities were drawn out through the method of qualitative content analysis on the literature of the producing steps of UCC, teacher's manual, the supporting elements (Shin, 2007; Moon, 2007; Ham, 2008; Kang, 2007) and blended learning (Lee, 2007; Lim, 2007; Smith, 2002; Fox, 2001; Reay, 2001; Masie, 2002).

B. Formative Evaluation of the Specialist

The first draft of the model was corrected and supplemented by the advice of the content specialist and the instructional design specialist to confirm the reliability of the research results. The specialists include 1 content specialist, 1 instructional designer, and 1 educational field specialist. Examination of the reliability of the model was executed, and the result of the examination by cross validation shows the reliability increased. The information on the interviewers for the formative evaluation is like the following Table 1. The questionnaires for the interview are composed of the core idea, process, core learning activities, and site suitability.

<table>
<thead>
<tr>
<th></th>
<th>content specialist</th>
<th>instructional design specialist</th>
<th>field specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>Jung. OO</td>
<td>Park. OO</td>
<td>Kim. OO</td>
</tr>
<tr>
<td>gender</td>
<td>female</td>
<td>male</td>
<td>male</td>
</tr>
<tr>
<td>age</td>
<td>43</td>
<td>50</td>
<td>42</td>
</tr>
<tr>
<td>reason for selection</td>
<td>Educational Technology major, Instructor of Early Childhood</td>
<td>Professor of P Univ. Dr. of Educational Technology</td>
<td>Professor of D Univ. Instructor of Early Childhood</td>
</tr>
</tbody>
</table>

Table 1. Focus Group Interviewers for the specialist of the formative Evaluation

C. Formative Evaluation

1. Participants of the Course

The model was applied in the course of 'Educational Technology and Method for Teacher Training' in the department of Early Childhood Education for the 3rd grade of K University
(58 students) majoring in Early Childhood Education from April 10th to June 24th, 2011.

The research caught hold of the degree of understanding of UCC for early childhood pre-service teachers, in order to develop the educational UCC model to get specific research procedure and data collection, data analysis method and security of reliability. Most students (97%) have experienced the concept of UCC, but have no experience of developing and making UCC, and little experience on video recording using mobile phones or digital cameras.

2. Data Collection and Analysis Method

This research executed the analysis of the participants' observation, reflection activities using the general strategy of the data analysis by qualitative research method in order to increase reliability. The site suitability of educational UCC model was analyzed based on student interviews, meeting reports, and reflection note. The data of the observation on the participants was collected throughout the whole process of the research. Meeting reports and the team reports online and offline were uploaded on the online cafe. Eleven facilitators among the participants of the course were interviewed, recorded and transcribed.

Also, the learning supporting cafe was managed for monitoring students' learning activities and for facilitating the mutual communication (http://cafe.daum.net/ETIM). This supporting system facilitated collaboration through various interaction using the functions of announcement, report, gallery, reflection and so on.

3. Formative Research and procedure

The formative research was implemented for eight weeks during the course. The pre learning for the UCC development was executed in class with a beam projector, PPT and videos. Topics were selected and shared, and explored the direction of the educational UCC model development, and then the composition of story and producing storyboard, final UCC
product and guidelines were supported. Eleven teams of 4-6 students were assigned each role and developed the strategy of educational UCC model.

D. Reliability Security

This research collected various data, utilized diverse resources, and more than two researchers worked together, and the method of triangulation was used to increase the validity (Kim, 1999). Namely, the content specialist, the site specialist for utilizing UCC, and the instructional design specialist were interviewed and the formative evaluation of specialist was exhibited and their advice was fully reflected in the research, and the data was extracted from the analysis on learning interview, reflection note, meeting reports, observation report and so on.

IV. Research Result

A. The First Draft of Educational UCC Model

This research used the core ideas in order to develop educational UCC model based on blended learning through the literature analysis on blended learning, UCC, and early childhood pre-service teachers. The implication of the research is like the following. First, active participation during the course was increased by supporting an abundant learning environment using the strong points of UCC and blended learning, and having the learners make the learning materials by themselves. Secondly, the roles should be assigned and the opportunity of the interactive collaboration to communicate and to solve the tasks should be supplied. Not only the pre-early childhood educational field, but also all the organizations can expect satisfactory result when the community produces communication and collaborating experience at work. Thirdly, the approach to the task of the teams and learning activities should be accessible
by the flexible design and management of the organization in the blended learning environment.

The process of the educational UCC production is various, and some scholars have different opinions on it (Lee, 2009). Ham(2008) suggested specific process and detailed activities as the process of UCC production like the following steps: first, selecting the topic, searching related information and classifying, and then, analyzing the learning content and making out the content design and the storyboard, building the shooting plan, shooting, digitalizing, editing, then, reviewing the draft video, using, evaluating. Based on the above researches, this research drew the educational UCC process and core activities.

The first draft of the educational UCC model including the core learning activities and supporting elements with the steps of the UCC production was drawn out. This model shows the overall diagrams on the learning procedures with basic steps such as learner activities, instructor activities, blended learning strategy and so on. Blended learning has diverse ways to use the learning time, learning place, learning media, interaction type and so on. And this Model was applicable for pre-service early childhood teacher education, model based on blended learning combining and utilizing online and offline learning strategies to maximize the effectiveness of learning. The first draft of educational UCC model based on blended learning is shown in <Table 2>.
Table 2. The First Draft of the Educational UCC Model Based on Blended Learning

<table>
<thead>
<tr>
<th>Stage</th>
<th>Process</th>
<th>Core Activities of Learner</th>
<th>Core Activities of Instructor</th>
<th>Supporting Elements of Learning Activities</th>
<th>Blended Environment</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Stage</td>
<td>UCC Performance Readiness</td>
<td>- Finding out Learning Objective and Advanced Learning</td>
<td>- Scaffolding -Guide the purpose of UCC learning</td>
<td>- Supporting the UCC development planning</td>
<td>OFF</td>
<td>• Team UCC developing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Recognising the performance procedure and method</td>
<td>- Coaching -Feedback on the pre step</td>
<td>- UCC video</td>
<td>OFF</td>
<td>• Learner analyzing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- UCC video experiencing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic Search</td>
<td>Topic Search and Setting</td>
<td>- Exploring various types of team building and Composition of the web of topics</td>
<td>- Scaffolding -Design and produce of the learning support cafe and UCC production</td>
<td>- Monthly schedule</td>
<td>OFF</td>
<td>• Forming topic-web</td>
</tr>
<tr>
<td>Setting</td>
<td></td>
<td>- Setting the activity schedule</td>
<td>- Coaching -Feedback on the planning step</td>
<td>- Supporting UCC supporting cafe (Information Resources)</td>
<td>OFF</td>
<td>• Cafe</td>
</tr>
<tr>
<td>Process Step</td>
<td>Relative Resource Defining and Sharing</td>
<td>- Role assignment of team members</td>
<td>- abundant learning resource - Support the attaining method of Information and resource - Coaching -Feedback on the process step</td>
<td>- Resource uploading and on cafe and sharing</td>
<td>ON/OFF</td>
<td>• Portfolio</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- UCC producing method</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>- Direct UCC video production method</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>- Introducing Moviemaker, Premiere Program</td>
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<tr>
<td></td>
<td>Task Solving</td>
<td>- Making up the first draft of task solving: writing storyboard and producing video - Correct and confirm the result of task solving : Upload the UCC video</td>
<td>- Communicatio n and collaboration support -Support on the discussion, Idea exchange, and feedback -Knowledge expression -Support the midterm</td>
<td>- Guide UCC uploading and introducing site Daum Cafe - Nate On</td>
<td>ON/OFF</td>
<td>• midterm producing and UCC producing</td>
</tr>
</tbody>
</table>

A Study on the Development of an Educational UCC Model
B. The result of Specialist's Formative Evaluation

This research revealed that the components of the five steps are the essential core process according to the result of the specialist's formative evaluation. Also, exploring the related resources, the step of sharing and task solving are the essential elements as well. And the whole flow of the model is systematically well composed as we see the component elements of each step of the UCC model, and proper for supporting the instructional learning activities. Also, this model is a process-centered learning model because it is not just trying to produce the result, but to guide each process. Also, this research shows that training of the video editing for learners such as video editing, sound, superimposed dialogue, image editing, and idea-producing tools are required.

After the first draft of model was applied in the course, this research drew out the strong points and the weak points of the model through observation, reflection notes, meeting report and analysis of the presentation. Kim's (1999) method of analyzation was used.
As a result, the strong point of the model is that the learners show positive response to team work rather than individual work on the assignment. This result reveals that the various ideas through the team meeting facilitates learning activities. Secondly, producing creative UCC through divergence and convergence of diverse ideas was actively practiced. Thirdly, pre-service early childhood teachers could participate in the course more actively as they collect the issues and informations related to early childhood educational and produce the materials by themselves in the blended learning environment. And participation in the course was increased through role assignments, communication for the task solving, and interactive collaboration in the blended learning environment.

On the other hand, improvement is required like the following. First, the pre learning of video editing program for producing UCC is needed. Namely, the video producing training should be prepared at pre-learning through student analysis. Secondly, the guidelines and tools are needed for instant communication in online activities. In other words, an instant online supporting system is required for collaborative relationship among peer learners.

C. The Final Draft of Educational UCC Model Based on Blended Learning

The result of the formative evaluation of the professionals, and the strong points and the weak points of the field application were reflected, and the model was corrected and supplemented like the following. First, the process of the
Stage | Process | Core Activities of Learner | Core activities of Instructor | Supporting Elements of Learning Activities | Blended Environment | Result
---|---|---|---|---|---|---
Pre Stage (Advanced Learning) | UCC Performance Readiness | • Learning for the video editing, image editing | • Analyzing learners | OFF | Process Step | Team research plan
 | | • Confirm the learning objective and advanced learning | • Surveying | | | learners
 | | • Recognition of performing process and the method | • Training for the UCC producing | | |
 | | • Experiencing UCC videos | • Guidelines for the method of collaborative learning | | |
 | Task Solving | Topic Search and Setting | • Scaffolding - Design and product the learning support for the Project of UCC production | • Supporting the team research planning | OFF | Relative Resource Exploring and Sharing | UCC video
 | | | • Team building and topic-web setting | | |
 | | | • Make the schedule of the activity | • Coaching - Feedback on the planning stage@ | | |
 | | | • role assignment of the team members | • Scaffolding - Guiding the purpose of the development of UCC and learning objective | | |
 | | | | • Coaching - Feedback on the prestige | | |
 | | | | • Supporting the team research planning | | |
 | | | | • Supporting the form and tools for the team building | ON/OFF | Closing Step | Topic-web
 | | | | • Supplying the tools for the composing the topic-web and producing the ideas | |
 | | | | • Supporting the monthly schedule | | |
 | | | | • Supplying the cafe for UCC supporting | | |

@: stage-1
A Study on the Development of an Educational UCC Model

IV. Conclusion and Discussion

This research developed an educational UCC model based on blended learning for pre-service early childhood teachers. For this, this research devised the Educational UCC Model based on blended learning and we corrected and supplemented the first
draft model through formative evaluation, then, applied the modified model into the course and drew out the strong points and weak points of the model and finally elicited the final model. The conclusion based on the result of the research is like the following.

First, pre-service early childhood teachers could effectively interact in the team, and become active and productive learners in the course as they were working on the program using this model. This research supports the research of Lee, who insisted that learners could enhance participation in the course as learners themselves participate in the work of planning and producing the videos by themselves and reflecting in various ways (Lee & Jung, 2008). Also, this research revealed that the usage of UCC for students in the University enhance the acquisition of various information, and the usability and usefulness of the information (Kang & Kim, 2009). Therefore, the experience of UCC is very important for pre-service early childhood teachers, and a synergy effect can take place in the organization when the individuals are well-organized and integrated within the team.

Secondly, the learners could have the opportunity of collaboration for team organization as they joined the process of assigning the tasks, creating the results in many ways, and posting them on the online cafe. And these activities emphasize interactive collaboration, so the learners could work on the task more actively as they were criticizing, reflecting, analysing, and collaborating at work.

Thirdly, blended learning was accessible for team assignment and learning activities as it is supplying the system for sharing and supporting the learning content, assignment and various information. A blended learning environment could correct the direction of UCC production through team discussion, so that it can reduce errors during the performance of tasks. Today, social networking is one of the main learning environments that makes communication and sharing available with no limitation of time and space, so it is needed to introduce how to use a social network in a curriculum more actively.
Fourthly, it is required to have a video editing program at the pre-learning stage to produce educational UCC more effectively. This research supports the research of Kang (2007) and Heo (2010), who pointed out the problem of the shortage of techniques for UCC production. That is why pre-service early childhood teachers felt difficulties in establishing educational objectives and contents through the work of UCC. Therefore, for the effective use of UCC, the training of making UCC such as UCC shooting, producing and editing should be supplied at the pre-learning stage.

For further research, proposals were suggested like the following.

Firstly, this research was executed only for the students in the department of early childhood education, so there might be a different result if this model was applied in other departments. So it is required to apply this model in the course of other departments and examine the effect and possibility of the model. Secondly, this research analyzed the data focusing on the positive and negative responses on the recognition of learners on team competency through field application. Therefore, experimental research on the effectiveness of UCC development should be examined. Thirdly, the investigation of professional knowledge and design for developing UCC and e-learning content based on the understanding of UCC instructional learning should be examined.
References


Heo, Y. J. (2010). A Study of Pre-teachers' Perception Change of Educational Usefulness and Limitation of Moving Image’s UCC. Education, Culture and Research 16(2), 111-143.


Jung, J. Y. (2007). Republic of Korea UCC trend Is Naver the


Kim, J. B. (2009). The Analysis of the UCC’s Effects on the Young People and Improvement Methods, Youth Cultural Forum 21, 46-76.


journal of the Korean association of geographic and environmental education 11(3), 119-132.


We, E. H, & Kim, M. J. (2006). A Research Regarding the Application and Development of Web Contents Data in
Home Economics. *Korea Homes and Education Journal* 18(1), 49-64.


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