

# Suggestions for Developing On-Line In-Service English Teacher Training Program

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## ABSTRACT

*The development of Information and Communications Technology (ICT) has changed the manner in which English teachers are taught as instructors, as well as English language learners. Online-related technology, a product of development of ICT technology, is used for various purposes such as training teachers and enhancing professionalism of current teachers to practice more efficient training. The purpose of this study is to extract common domains and sub-domains related to development of cyber-type in-service training (INSET) through domestic and international case analyses and to develop content areas of INSET using cyberspace or efficient online INSET programs. To accomplish the purpose of this study, domestic and foreign cases were analyzed in relation to direction of development of online English teacher training programs.*

**Key words:** English Teacher Training, INSET, Online Program, Domain, Development of Teacher Training Program.

## 1. INTRODUCTION

The development of Information and Communications Technology (ICT) has changed the way English teachers are taught as language learners. Online-related technology, which is a product of the development of ICT technology, is used for various purposes such as training teachers and enhancing the professionalism of in-service teachers. The purpose of this study is to examine how online technology is applied to teachers' training and professional development programs in the digital environment, and to analyze domestic and foreign cases related to the development direction of online teacher training programs. In-service training (INSET) has been developed through the use of internal and external e-learning evaluation tools and evaluation criteria analysis, and this study extracts the common domains and items related to the development of in-service training (INSET), and develop implications for content area of online program. Research on combining online technology and teacher training has been rare, therefore, this study is based on the reconstruction of part of research [1] so that it can be in accordance to a current national curriculum.

## 2. THEORETICAL BACKGROUND

In the present digital environment, ICT is understood as one of the essential knowledge that teachers should have. This is defined as Technological Pedagogical Content Knowledge (TPCK) [2]. TPCK is knowledge of the concepts in PCK [3]. TPCK is a basic knowledge to perform effective teaching activities by utilizing ICT [2]. It is also a knowledge that can understand the ways of how the concepts to convey in the subject are realized through not only simple technical knowledge but also TPCK.

The position of ICT in such educational environment has become an essential element in ICT integration in the field of teacher training and in-service teacher professional development. The advantages of running an online professional extension program can be realized through the principles of convenience, economics, and direct application of content [4]. The best professional development programs are needed to improve the effectiveness of quality teachers [5]. In addition, the most ideal in-service teacher's professional development program is a tailor-made course that meets the needs of individual schools and teachers. The most ideal program to implement this is the expertise extension program using e-learning.

An e-learning model was proposed as the most ideal model of the professional development program of teacher training institutes and in-service teachers [6]. In this way, the teachers are able to share their experiences and their own expertise through peer group activities [7]. It was suggested that this should be used in the harvesting process to contribute to the development of practical teacher professionalism [8]. When introducing the blended learning format and various learning methods beyond the simple meaning education that

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develops quality contents, the cyberspace INSET (In-service Teacher Training) can be effective for the integration type. It was also argued that the ideal INSET requires the introduction of this kind of reflexive approach in which the teachers can look at themselves [8].

### 3. DIRECTIONS TO THE DEVELOPMENT OF ONLINE CYBER TEACHER TRAINING PROGRAM

It was pointed out that INSET is an essential step that a teacher should take from the beginning of his or her teaching career [8]. In other words, it is not a training course that is required or forced by others, but by herself for better contribution to her students when she takes the first step into teaching profession. From this point of view, the professional development program must be received continuously to reflect the needs of students, society, and schools. The direction of INSET is described as follows.

- Introduction of new curriculum, educational materials, teaching and learning methods
- Teacher's new role of preparation process
- Provide opportunities for teachers to do early in planting
- Provide opportunities for self-improvement for unqualified teachers
- Provide opportunities to be qualified teachers

In a study of Canadian online teacher training programs, online training should have a direction to reduce the training costs of training personnel and participating teachers, and secondly, many teachers should have benefit from the program [9]. The program was developed to provide customized activities for individual teachers who complete or will complete the training for professional development. The following way to make the most of the advantages of online was suggested from the study; Interactive systems and the functions of searching and utilizing high-quality materials such as CMC (Computer Mediated Communication) [9].

Regarding to the direction of online teacher training program, it was suggested that CMC technology in accordance with ICT development should provide an environment in which teachers can provide learning opportunities each other through interaction of various computer media and ultimately acquire communication techniques [10]. At the same time, it should have functions of supporting collaborative learning through discussions, and providing opportunities for peers and self-reflection. As such CMC-specific discussions and on-line teacher professional development programs are offered online, the discussions could have lots of contents on language learning and teaching.

It was also suggested from other studies regarding technology use in language teacher training program that efforts should be made to make online learning environment more accessible and realistic, given that online training is becoming more and more common [11]. For example, after a seven-week online TESOL course based on the Multiple Intelligent Theory was established, the study suggested that the

participants were able to develop critical thinking, motivation, and processes to meet personal needs which have implications for developing online language teacher training courses.

Through the literature review on the development of domestic and foreign literature on cyber INSET program that have been examined so far, it is shown that the universalization of cyber-type teacher training programs is not just a space for training teachers, but a space for having reflective opportunities. In other words, by utilizing the advantages of cyber space, it is possible to provide an environment to acquire communication techniques through cooperative learning, to form a network with peer teachers, and to have an opportunity to look at oneself through discussion. It is a direction of online INSET program that utilize cyber to have opportunity to actually experience various teaching and learning methods for teachers as an language learner as well as a language teacher.

### 4. ANALYSIS OF ONLINE TEACHER TRAINING PROGRAM

The program evaluation of the cyber-type INSET can basically be divided into two parts; the same part as the evaluation of the offline INSET and the part that reflects the characteristics of the cyber-type INSET. In particular online program, some parts related to the purpose and contents of INSET are the same as offline INSET; however this study deals with the studies regarding online program. Moreover, in the case of individual subjects such as language arts or mathematics, it is desirable to provide trainees with specific achievement goals and learning strategies. In other elements of off-line and on-line program, it is also important to reflect the needs analysis results of the training participants. These elements will also be analyzed in this chapter. In this study, the evaluation areas are extracted, which is required for providing implications for developing online INSET program.

#### 4.1 The Guideline of E-learning Quality Management [12]

The following table 1 displays the specifications presented about the content evaluation of major countries by analyzing overseas guidelines of e-learning quality management.

Table 1. Emphasis Point of Content-based Evaluation by Countries [12]

nation	emphasis	
Singapore	contents	meaningful construction
	interface	usefulness
	instructional design	learner-centered/feedback, evaluation, interactive
Japan	learning quality	data management and evaluation materials for learning-related activities
Australia/ New Zealand	educational point of view	learner centered
	characteristics	accessibility, interaction
France	support	learner support, certification of learning

Singapore emphasized the meaningful composition, interface of content, learner-centered feedback, and interactivity in teaching design. In Australia and New Zealand, the focus was on designing repetitive methods with an interest in user-centered learning resource design and development. In France, the emphasis is on learner support and certification in the early stages of development, implementation and evaluation. Overall, in each country, the content area is composed of comprehensive needs analysis, requirement analysis, instructional design, learning contents design, teaching-learning strategy, interactivity, support system, evaluation, feedback, reusability, shared distribution, and ethics.

#### 4.2 National E-learning Quality Management and Criteria

Table 2. National E-learning Quality Management and Criteria [13]

Domain	Criteria
Needs Analysis	learner analysis / teacher analysis / learning content analysis / learning environment analysis / idea planning
Instructional Design	selection of learning / learning element data by level / interface and progress
Design of Learning Contents	learning contents selection / organization of learning contents / difficulty level / learning volume / supplementary learning materials provision
Teaching-Learning Strategy Selection	self-directed learning element / motivation strategy
Interactivity	learner and instructor (including operator, manager, tutor) / between learners and learning contents / between learners and learners
Supporting System	selection of support contents / selection of support methods / application of support tools
Evaluation	selection of evaluation contents / selection of evaluation methods / application of evaluation tools
Feedback	learning process monitoring / evaluation results

#### 4.3 Evaluation Criteria of Pennsylvania State University

In the case of the United States, evaluation criteria are established and operated according to each institution. For example, the guidelines for the development and design of distance education materials are created by the Pennsylvania State University through collaboration with the University of Lincoln and the University of Cheney [14].

- Learning Goals and Content Presentation
- Interactions

- Assessment and Measurement
- Instructional Media and Tools
- Learner Services and Support

In the learning objectives and content areas, the following elements are evaluated: whether the learning objectives are defined as part of the instructional design, whether the learner is given instructional activities to acquire and experience the knowledge and techniques necessary to achieve the purpose and goal of the training through the training, and whether it has an assessment tool that can assess achievement, and whether its faculty has the support the language teachers need to prepare and produce teaching materials.

#### 4.4 Online Course Evaluation Presented by Colorado State University

Table 3. Online Course Evaluation Presented by Colorado State University [15]

Domain	Criteria
Precondition	learner analysis / teacher analysis / learning content analysis / learning environment analysis / idea Planning
Composition	selection of learning / learning element data by level / composition of screen and layout / interface and progress
contents	selection of contents / organization of learning contents / difficulty level / amount of learning / supplementary learning materials provided
Interactivity	selection of evaluation contents / selection of evaluation methods / application of evaluation tools
Evaluation	provide learning-related monitoring / evaluation results
Feedback	

It is characterized by whether it is a program officially recognized in the country or in a state, whether it is in conformity with state or national standards, and whether it is the curriculum approved by the local education office and the Ministry of Education. The learner site is evaluated separately, and the evaluation interaction and evaluation of the course content are subdivided by several levels.

#### 4.5 Online Course Evaluation Criteria of Florida Gulf Coast University

Table 4. Online Course Evaluation Presented by Florida Gulf Coast University [16]

Domain	Criteria
Instructional Design	audience analysis, course goals/objectives, instructional activities, student and course evaluation, teaching strategies

Interaction and Feedback	interaction among learners, interaction between learners and instructor, interaction between learners and instructional materials, collaboration, pace and procrastination
Course Management	time requirements, progression through course, evaluating student progress providing adequate feedback

Content design includes domain of audience analysis, learning objectives, instructional activities, strategies, and evaluation areas and evaluation of interaction between learners and instructors, learners and learners, content with learners and collaborative learning, and course management and technical support Area.

#### 4.6 Guidelines for Online Courses of Texas Institutions

In the case of Texas institutions in the United States, there are three service guidelines for online courses: course elements, learning support, and financial elements.

Table 5. Online Course Evaluation Presented by Texas Institutions [17]

	Domain	Criteria
Contents	Course Elements	learner analysis/ teacher analysis /learning content analysis/ learning environment analysis/ idea Planning
	Learning Support	Selection of learning / learning element data by level / composition of screen and layout / interface and progress
	Financial Elements	learning contents selection / organization of learning contents / difficulty level / learning volume / supplementary learning materials provision

Course element is a comprehensive concept that includes contents and courses related factors such as course design, contents, teaching strategy activities, evaluation, course utilization, etc. In the case of learning support, technical support, and services for students and parents are included. In addition, financial factors include the company's financial status and background, and intellectual property rights. The characteristic in this evaluation is that the evaluation items include information on the financial structure, intellectual property rights, and the cost of the company that provides the online program. Therefore, in the case of the online course service, intellectual property rights, and costs are considered to be important factors in the Texas Institutions.

## 5. CONCLUSION

Based on the analysis of the national and international literature review on the most common and core domains and elements of online English teacher training courses evaluation

program are extracted as follows: first, the general domain in the program planning stage, second, contents area as the key composition domain, and third, the LMS (Learning Management System) area centering on the learner management in the training.

First, the focus of the program planning phase is on the adequacy and clarity of the educational objectives and objectives of the cyber INSET, as well as the needs analysis of the participants. In the case of cyber INSET, the general purpose includes the purpose and goal of the training, the analysis of the audience, and the analysis of the school and its context. This is something to be considered in the program planning stage and can be viewed as general constitutional framework of the program.

Table 6. General Domain of Online INSET Program

Domain	Sub-domain	description
General Domain	Appropriateness and Clarity of Training Objectives	cyber INSET appropriateness and specificity of objectives and goals
	Needs Analysis	analysis of learners, analysis of learning contents, analysis of learning environment, context analysis

In relation to domains and elements in general domain, in the case of 2009 revised national English curriculum, training objectives and goals, concrete objectives and achievement standards for achieving the objectives of the English language teacher training presented by the Ministry of Education, Science and Technology should be stated as follows.

- Cultivate the ability to operate communication-oriented curriculum of elementary and secondary English teachers
- Improvement of English education by improving English proficiency and teaching ability of English teachers

In short, the general domains in online INSET program should include those in the national curriculum in Korea.

Second, it is a content item that is the core domain of the program. Content sub-items include content-related items such as content development, operation, user-friendly design, teaching strategies, and evaluation. In the case of online INSET focusing on individual content and learner interaction, individual learning objectives for each content and specific learning method for achieving them, and achievement criteria should be presented in individual contents and evaluation.

Table 7. Contents Domain of Online INSET Program

Domain	Sub-domain	description
Contents	Teaching Strategies	relationship between learners' interests and IT Contents
	Design of Instruction	present learning goals the characteristics of the training, the characteristics of the learners,

		Selection of learning materials
	appropriate data for teachers	effectiveness of delivery, meaningful data
	level based learning	design, supplementation and excellence system considering learner level
Evaluation	evaluation method for participating trainees	

The contents domain should be consistent in content design, and it is desirable to implement the online environment through the design so that the training participants can immerse themselves in the training. Also, the curriculum includes selection and quality management of learning contents, evaluation of learning level and level-based learning, and evaluation to create curriculum suitable for the training target.

The contents area can be re-categorized as follows, focusing on design of contents, teaching & learning strategies, and evaluation depending on the specific sub-domain that needs to be emphasized.

Table 8. Alternative Contents Domain of Online INSET Program

Domain	Sub-domain	description
Contents Design	Selection of Learning Contents	selection of key content related to achievement of training goals, including up-to-date information and trends
		degree of utilization in classroom after training
	Organization of the Contents	degree of consideration of learners' level
		degree of accuracy in content delivery of Meaning
Teaching & Learning Strategies	Amount of Learning	degree of consideration of learners' characteristics
	Selection of Teaching and Learning Strategies	applying teaching-learning strategies suitable for online environment, and self-directed learning
	Content and Method of Evaluation	the validity of the content and method of evaluation, learning objectives and contents of evaluation, content consistency appropriateness of evaluation timing, evaluation method, and evaluation tool

Finally, the LMS can include items such as management of the process of learning such as learner and instructor, interaction between learner and learner, training course

operator and learner/instructor, feedback, self reflection, and cooperative learning.

Table 9. LMS Domain of Online INSET Program

Domain	Sub-domain	description
LMS	Interactivity	full framework of program promoting learning by providing meaningful feedback
	Feedback	management of Relationship between learners' interests and IT management of trainers' timely feedback
	Reflection	self-directed and trainer's management of learning process/degree of preparing and organizing plans for the next training
	Cooperative Learning	evaluation method for participating trainees during learning process

Especially, since online INSET is a program for teachers, it is also necessary to consider designing a specialized online site and running training through it. In addition, the approach to ethics, copyright, and socio-cultural contexts, should also be considered in the development and operation of online courses [13].

## 6. DISCUSSION

The domains and items examined so far are extracted from the evaluation items based on e-learning evaluation criteria and online literature review related to online program [13].

The cyber-type INSET program is operated in cyberspace, compared to the offline INSET, but its original purpose is the same. However, by taking advantage of information and technology, cyber space needs to be developed not only as a cyber-type INSET but also as a means of teacher training and professional development programs, including the training of TESOL teachers and follow-up research. Cyberspace also facilitates activities such as cooperative learning and critical thinking.

For this purpose, it is important to establish a communication channel between teacher and training staff, teachers and teachers, and to make use of various functions of cyberspace to increase the effectiveness of learning. In the case of cyber-type INSET, it should not be overlooked that it is developed for in-service teachers. This fact should be considered from the stage of development planning of educational contents. In addition, it is necessary to find various ways that teachers can utilize what they have learned in INSET online program as well as in classroom.

ICT technology is being developed at high speed day by day. In the case of technology-based PCK currently being carried out, technology and foreign language expert professors in Korea are trying to improve the professionalism of actual



teachers through the international network. These developments are also of great importance to cyberspace INSET. In other words, the online INSET program needs to be developed in such a way that networking can be built. The results of this study need to be more specifically developed and researched.

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