# A Tentative Approach To the Evaluation Model of Web-based Distance Education For the Deaf

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## ABSTRACT:

Building an effective evaluation model has been one of the important subjects for distance education workers. Based on the features and requirements of web-education, the authors design an instructional evaluation model for web-based distance education for the deaf. This paper is aimed to introduce the model.

**Key words:** the deaf; evaluation of Web-based instruction; evaluation factors; evaluation model

## 1. FORWORD

The evaluation of Web-based instruction is the subcategory of education evaluation. It has three significations(value judgment, development estimation, reference criterion). Web-based instruction has its own bright feature, campareing with traditional instruction, such as separating teaching from learning, independent learning course(The learner must be self control, adult learner is as usual), and so on. Thus the evaluation of Web-based instruction also has its own bright feature.

# 2. FEATURES OF THE EVALUATION OF WEB-BASED INSTRUCTION

The evaluation of Web-based instruction emphasizes process assessment, that is, it focuses on the real-time monitoring of the instruction process. It includes assessing the effect of intelligent instruction and such teaching methods as search, discover, compete, co-operate and role-play, and evaluating students' initiative, self-controlling and leaning effect. The evaluation objects include not only the four factors of the traditional instructional system—the student, the teacher, the instruction content and the medium (i.e. the supporting platform of

Web-education), but also the support service systems. The recording function of the supporting system can collect information of the instruction activity for evaluation so as to allow a dynamic assessment and control of the Web-based instruction. The technological advantage of the Internet can not only shorten the evaluation cycle, supply timely feedback of the evaluation results, but also reduce the cost and make fewer technological demands on the school administrative authorities when they carry out the assessment.

# 3.THE EVALUATION MODEL OF WEB-BASED INSTRUCTION FOR THE DEAF

Different evaluation targets and objects require different ways of assessment. So if we want to fully assess the teaching/learning process and effectiveness, we have to make indexes and elements which are suitable for the evaluation of Web-based instruction. Only in this way can we promote Web-education.

In view of the characteristics of the Web-based instruction evaluation and the deaf students, we build the following evaluation model of Web-based instruction. It includes the assessments of the student, the teacher, the learning material, the instructional supporting system, and the supporting/service learning system. Each item contains several subcategories.

The model shows that the assessment of Web-based instruction depends on the implementation of the instructional evaluation model. It includes qualitative and quantitative indexes. There are two ways of assessment, process assessment (or formative assessment) and conclusion assessment. It emphasizes the role of formative assessment in promoting teaching and learning.

## 4.EVALUATION PROCESS

The evaluation of Web-based instruction is a dynamic process. Although there are different ways of assessment, preparation, implementation, processing and feedback are the four inevitable phrases as the chart shows.

#### 4.1 Preparation

- (1) Set the evaluation target of Web-based higher education for the deaf.
- (2) Choose the information source and the processing method.

According to the decided evaluation object, the evaluation information may come from scores, the quantized evaluation index, the evaluation quantitative form, the activity log, the daily record of class activity, feedback letters and so on. Together with the index system, we can then decide the information processing method.

(3) Create examination paper, evaluation quantitative form, or questionnaire.

#### The Evaluation Model of Web-based Instruction

The flow chart of the evaluation process of Web-based instruction

#### Turn to the appendix

#### 4.2 Implementation

As for the deaf student, we can use the quantitative form.

(1) Test or hand out the evaluation quantitative form
If it is a test, the testing time and rules should be displayed at the end of the service system.

If it is the evaluation quantitative form, the form should be sent to the e-mail box of every student with the date for handing back. The number of the handed-out form should be recorded.

 Get the information, eliminate the invalid information and carry out error diagnosis

Count the number of the forms handed backed, eliminate invalid forms and decide the validity of the evaluation.

# 4.3 Processing

- Process and count the information according to weight.
   The system will automatically count the score of the evaluation quantitative form.
- (2) Analyze the statistics and make overall diagnosis. The evaluation staff analyzes the evaluation quantitative form, the activity log, the daily record of class activity, feedback letters and then make overall diagnosis.
  - (3) Form the overall diagnosis and analyze problems.

The aim of the evaluation is to provide a basis for the improvement of the instruction and the system. The evaluation staff should write down the evaluation result according the assessment criteria. They also have to analyze problems and find out the origin. The conclusion of the formative assessment includes: the measurement of, advice and guiding suggestions for

students' performance, the measurement of, advice and guiding suggestions for a teacher's performance, the assessment of and remedies for the routine course instruction, remedies for the system, improvement suggestions and remedies for the course content. The conclusion of the conclusion assessment should include the performance decision for both the teacher and the student.

#### 4.4 Feedback

#### (1) Pre-feedback evaluation

This consists of estimating the quality of this evaluation, assessing the evaluation work, discovering problems and putting forward measures for improving the evaluation.

#### (2) Feedback

Bulletin and e-mail are the two ways to feed back the assessment of the student and the teacher. Both the teaching and learning activities should be assessed regularly. What is worth praising should be put on the bulletin while the improvement scheme should be fed back to the teacher or the student by e-mail.

The assessment of the system and the course content should be fed back in the form of evaluation report which contains the improvement measure and is submitted to the teacher or the system supervisor or the technician of the website.

#### (3) Reevaluation

Instructional evaluation is in itself a cycling process. A new cycle begins after the education decision. The teaching activity should be adjusted according to the instructional evaluation. The analysis of the plan, process and result of last evaluation can provide effective information for next evaluation. Therefore, the reevaluation of the evaluation results is both an end and a beginning.

# 5.CONCLUSION

Distance education for the deaf demands a better quality of the learner himself. In evaluating higher education for the deaf, we should make education our starting point, combine the advantage of Web-education and the sensitive sight of the deaf. Their successful combination can bridge the communication barrier of the deaf and promote deaf education to a new height.

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## APPENDIX

# The Evaluation Model of Web-based Instruction

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网络教学评价系统: the evaluation system of the Web-based instruction
学习材料提供: supply the learning material
教师(teacher)
               ↑ 作业与答疑: assign homework and solve problems
                文互: interaction
                                                交互程序: interaction process
答疑情况: problem solving
学习活动(learning activity)
学生(student)
学生(student)
学习结果(learning results)
合無情况: problem solving
资源利用: use of the resources
态度: attitude
策略: strategy
作业: homework
                                                             c 内容: course content
学习资料(learning material)
                                · 网络课件(network courseware) 结构与导航: structure and guide
                                                            ↓ 练习/反馈:exercise/feedback
                                                              交互: interaction
                                                             技术: technology
                                 其它资料: other materials
                                                     稳定/可靠: stable/ reliable
                    √技术系统(technological system) ↓ 方便: convenient
                                                     快捷: fast
                                                   规范: standardized
网络教学支撑系统(the instructional supporting system)
                    策略支持: strategic support
助教/学系统: teaching/learning assistant system
资料: material
工具: tool
                                                   系统/教务管理: system administration/teaching affairs
                                                                         administration
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資料提供: material supply 评价量规: benchmarks for evaluation 学习咨询: consultation 学习咨询: consultation 数师培训: teaching personnel training 技术培训: technical training 资金/技术保障: fund/technical support

# The flow chart of the evaluation process of Web-based instruction

