CASCADE: Computer ASsisted Curriculum Analysis, Design and Evaluation:
A Development Research Project

Nienke Nieveen
University of Twente, the Netherlands

Introduction

In this paper we will report about a collaborative study of the University of Twente (Faculty of Educational Science and Technology, Department of Curriculum) and the Dutch National Institute for Curriculum Development (acronym SLO). In a four year development research project we will develop a prototype (with complete and tested specifications) of an electronic performance support system called Computer ASsisted Curriculum Analysis, Design and Evaluation (CASCADE)

With the development of CASCADE we aim at exploring the supporting role of the computer contributing to quality improvement and more efficiency of curriculum development activities. Gery (1991) distinguishes three components of an electronic performance support system (EPSS): an infobase, advisory system and computer based training. In CASCADE the first two components will be stressed.

CASCADE will have an initial focus on the component of formative evaluation. We have chosen for this component because until now it hasn't had the emphasis it deserves in the SLO curriculum development activities (van den Akker, Boersma & Nies, 1990).

Method

Because of the many uncertainties concerning the formulation of procedural recommendations for curriculum development activities and the development of the computer support system, we have decided to follow a development research methodology.

A preliminary study (van den Akker, Nieveen & Plomp, 1993) on the possibilities of computer supported curriculum development resulted in a set of recommendations for the design of such a system for the development activities of the SLO. In close interaction with curriculum developers (the target group) these findings will be elaborated and evaluated, so that the content of the support system and the support system itself will evolve. Besides a final prototype this kind of research also aims at contributing to the methodology of designing such computer support systems.

Because of the importance of involvement of the target group during the development process, in an early stage a user group of curriculum developers was formed. The role of the user group is to provide feedback on every prototype and to suggest possible improvements for the development of subsequent prototypes. Prototypes will also be

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evaluated formatively by finding out how curriculum developers use the computer support system and by asking other experts to give their judgement on it.

Results
By August 1994 the first prototype will have been developed and tested. In the paper we will discuss the evolvement of the functionality and technical aspects of Cascade as well as the results of the development and formative evaluation activities.

N.M. Nieveen
University of Twente
Faculty of Educational Science and Technology
Department of Curriculum
P.O. Box 217
7500 AE Enschede
The Netherlands
Phone: +31 - 53 - 893625
Fax: +31 - 53 - 329136

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