## RESUMEN

En esta tesis se presenta un modelo cooperativo-colaborativo de trabajo en siete etapas para formación/capacitación de recursos humanos denominado 4C (cascada para capacitación cooperativa–colaborativa). El modelo se aplica a través de un ambiente de trabajo distribuido cuyo soporte es un software para groupware.

Para poner a prueba el modelo se desarrolló el prototipo COOP–LAB (Cooperative Laboratory) con las características que se deseaban para la aplicación tales como chat, pizarrón virtual, browser y e-mail.  Se realizó una experiencia de capacitación de profesionales que amerita la validación del modelo y el software de aplicación.

## ABSTRACT

In this thesis a cooperative–collaborative model of working which consists of seven phases for the formation and training of human resources called 4C (in Spanish) stands for cascade for cooperative and collaborative training, is presented.

The implementation of the model is through a distributed working environment which is supported by a software for groupware.

In order to test the model a prototype called COOP-LAB (Cooperative Laboratory) was developed. It included some characteristics which were essential to the model, such as chat, virtual board, browser and e-mail.

It is also introduced a training of professionals experience which deserves the validation of both, the model and the application software.