

# MIKSIKE: An Interdisciplinary Study Program for Elementary Schools and Home Schooling Integrated with Web Technology

Mihkel Pilv ✓

## Abstract

MIKSIKE is an interdisciplinary study program integrating Web technology designed to serve elementary schools and home-schooling families. Developed by a small Estonian company, MIKSIKE is divided into cross-curricular study cycles that last 3 to 5 weeks. The online program works with a standard Web browser and has three areas: (1) student worksheet templates; (2) a chat room for students, teachers, and the MIKSIKE facilitator; and (3) an Internet window.



## Introduction

What does 'MIKSIKE' mean? Miks is the question "why" in Estonian. Miksike is the affectionate diminutive of the same word. This combination is, of course, grammatically inexact and doesn't exist in the dictionary; it is just our way of expressing how we emphasize inquiry as an integral part of the study process. MIKSIKE is a small company, which operates the MIKSIKE program. It is located in Estonia's second largest city, Tartu, which has approximately 100,000 inhabitants.

## Cross-curricular Collaborative Learning

MIKSIKE is an interdisciplinary study program integrated with Web technology. It was developed to serve elementary schools and home-schooling families. Work in the MIKSIKE curriculum is divided into cross-curricular study cycles—projects and thematic units—which last from 3 to 5 weeks. Units include "Running through Time," "A Journalist's Living," "Weather Station," "To the Farm," "I Am," "Connected," "Searching for a Planet," "Make Believe Life," and "Plant Life." To facilitate collaborative learning, the program uses electronic learning resources—eTemplates—and an online support center—the eLounge.

## eTemplates

eTemplates are worksheets written in HTML. Their greatest advantage is their flexibility. By using HTML editors, students can modify the content and questions on the worksheet quickly. eTemplates enable us to make the study process more creative and still preserve needed stability.

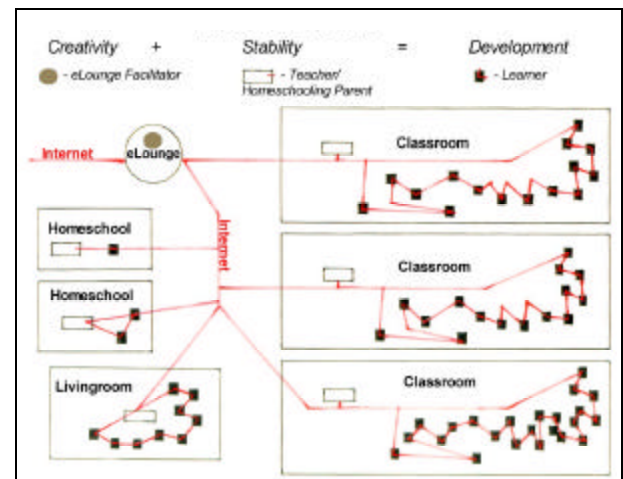


Figure 1. MIKSIKE structure.

## eLounge

Modern learning does not mean only new curriculum resources, an integrated approach, and modern technology. A new kind of organization is also needed. An online support center (eLounge) is

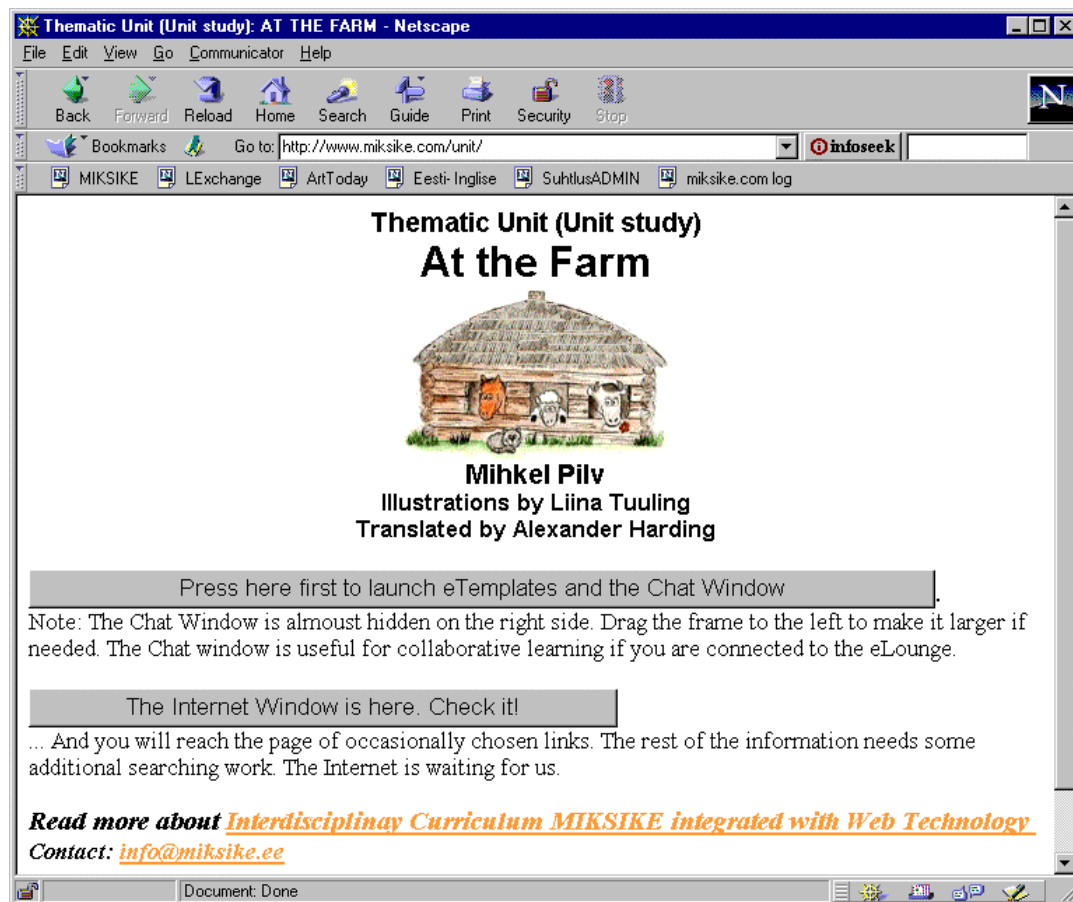
integrated into the learning activities of several classrooms or home schools at a time. The eLounge facilitator guides learners in real time. The facilitator is sitting at the other end of virtual reality, that is, in the office where the MIKSIKE Web server and resources are located. eLounge services substitute for hard-copy teacher lesson plan resource books. The eLounge is similar to a live show; it guides online the collaborative learning communities who are currently working on the same project or thematic unit.

#### *MIKSIKE Online*

MIKSIKE Online (<http://www.miksike.com>) is our software solution, which integrates eTemplates with needed communication, collaboration, and infor-

mation retrieval tools. It works through a standard browser. The browser has three regions: (1) student "eTemplates"; (2) the Chat Window, which includes students of all schools, classrooms, or home schools in different locations who are following this specific project or thematic unit; teachers and parents; the eLounge facilitator; and, if needed, a specialist that the eLounge facilitator can call in; and (3) the Internet Window (see Figure 2).

The default page during a study cycle is an eLounge home page that the facilitator has prepared for a unit. The home page does not contain ready-made answers but just hints and links to guide learners to the correct answer. In addition, a way to the real Internet is open in this area.



**Figure 2. Sample window.**

#### **Conclusion**

Modern learning is not merely the memorization of facts prescribed by resources and curriculum from teachers and parents. Hard drives store data. The

primary goal of education today lies in our ability to develop thinking skills—skills to ask questions, solve problems, and to search for information. Asking, searching, understanding, integrating, and

---

once again searching and asking—MIKSIKE creates the necessary environment and resources for learning these skills.

