



## Educational technology to train teachers of minority languages in Canada: Challenges and successes

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Canada is the world's second largest country by total area, occupying most of northern North America. For its ten provinces and three territories, Canada must offer education in either English or French, the country's two official languages. This raises many challenges, particularly in areas or provinces where one language, usually French, is a minority language. For example, in Ontario, Canada's second largest province, there is a significant shortage of qualified French-speaking teachers. Moreover, although many schools employ some teachers who are not fully qualified, it would be unthinkable to remove them from the classroom for further training, given the lack of teachers. To cope with this challenge, the School of Education of Laurentian University launched a distance teacher training program. Early into the program, the candidates found that distance education was insufficient to help them meet the challenges of classroom teaching. After conducting interviews with our prospective teachers (n = 125), we realised that the theoretical content provided through the distance program needed to be complemented by classroom observations. However, this appeared to be impossible in the circumstances. In this paper, we highlight the findings of our study on the use of educational technologies to train minority-language teachers in Canada. We will focus specifically on the video component that we included in the distance training course. We will show how the videos (over 75 real-life recordings of teachers and pupils in a variety of common pedagogical situations) actually benefited the teachers-in-training, who reported increased feelings of competence, among others.

Keywords: teacher education, educational technology, video, training

### Introduction

Canada is the world's second largest country by total area, occupying most of northern North America from the Atlantic Ocean in the east to the Pacific Ocean in the west and northward into the Arctic Circle. For its ten provinces and three territories, Canada must offer education in either English or French, the country's two official languages. This raises many challenges, particularly in areas or provinces where one language, usually French, is a minority language. For example, in Ontario, Canada's second largest province, there is a significant shortage of qualified French-speaking teachers. Moreover, although many schools employ some teachers who are not fully qualified, it would be unthinkable to remove them from the classroom for further training, given the lack of teachers.

### Context

In order to cope with this substantial challenge, we decided to implement a distance education program for minority-language teachers in Ontario (French-speaking teachers). However, the candidates quickly raised some issues, pointing out that the theoretical material they received needed to be complemented by classroom observations, both to make the course more accessible and to ground the course in reality. Basically, they felt that distance education alone would not fully prepare them to be qualified teachers. They believed that distance education would not give them a proper, professional teacher education. This request raised another substantial challenge, because the program they were following did not provide the classroom observation hours or internship opportunities included in the regular teacher-training programs held at the university. The candidates wanted the classroom brought to them, and at times outside regular school hours.

The solution was to develop an online teaching resource (Cyberprofs, see Figure 1). Cyberprofs contains over 75 video clips of authentic, in-class pedagogical activities and interactions, with comments by experts, teachers and pupils. When creating this resource, care was taken to preserve the spontaneity and naturalness of the people and activities filmed, an essential element in vicarious learning through modeling and imitation (Bandura, 1997; Poppers & Lipschiz, 1993). These videos can be used to train teachers in Canada and abroad. Each year, the site receives over 200,000 visits ([www.cyberprofs.org](http://www.cyberprofs.org)), which clearly underscores the need for this type of online teacher resource.

## Objective

The objective of this study was to better understand the successes and challenges inherent in the use of educational technologies to train minority-language teachers in Canada. More specifically, we wanted to understand the impact of a variety of freely and continuously accessible online video clips on the quality of distance teacher education.

## Method

In order to better understand the successes and challenges inherent in the use of educational technologies for distance teacher training, we administered a questionnaire and conducted individual interviews (n = 12) and focus groups (6 focus groups of 20 teachers-in-training). Data was collected on the effectiveness of educational technologies and their impact on the quality of teacher training, particularly the video clips that were developed and implemented.



Figure 1: Screen capture of the Cyberprofs project

## Results (to be presented)

In this presentation, we will describe the resource we developed (Cyberprofs project) and the main impacts on teachers-in-training. One finding of this development research project is that educational technologies, and particularly video clips, significantly complement the education of teachers who are studying at a distance from the university. Moreover, the interviews conducted with the candidates clearly underscore that freely and continuously accessible online video clips, presenting real-life classroom interactions and pedagogical activities, significantly increase teachers' feelings of competence. Furthermore, many other advantages are associated with the use of authentic videos accompanied by comments from experts, teachers and pupils.

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