



# RACOL

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Rural Advanced Community of Learners

## **Professional Developmet**

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### **1.1 Executive Summary**

One of the main deliverables of the RACOL project was conceptualizing and delivering professional development to participating Rural Advanced Community of Learners (RACOL) teachers. The professional development team, coordinated by David Geelan of the University of Alberta, fulfilled this deliverable to the participating RACOL teachers in the Fort Vermilion School Division (FVSD).

The philosophy of the professional development program was to foster a community of learners among the participating teachers, as well as to support their development of specific skills and knowledge needed to effectively teach within the Virtual Presence Learning Environments (VPLEs). Professional development learning experiences were scheduled which included both face-to-face workshops and monthly videoconference meetings. The opportunity to have continual e-communications with the professional development team was also made available to the RACOL teachers.

The conceptualization and delivery of professional development was successful. This conclusion is based primarily on informal and formal evaluations completed by RACOL teachers to date. Furthermore, the conceptualization and delivery of the professional development has provided a remarkable opportunity to share lessons learned within international, peer-reviewed conferences and publications.

### **1.2 Background**

One of the main deliverables of the RACOL project was to develop a model and deliver a professional development program to participating RACOL teachers in the Fort Vermilion School Division (FVSD). To effectively carry out this deliverable, David Geelan of the University of Alberta was invited to create and coordinate a professional development team. Karen Fiege joined the team and played a key role in the implementation of the professional development program.

Professional development learning experiences were conceptualized and delivered in order for the RACOL teachers to develop and adopt second-generation teaching and learning models based on the 'community of learners' theory. Another aim of the professional development program was to support teachers in developing the necessary skills to exploit the technical and educational capabilities of the broadband networks within the FVSD and the province of Alberta.

Two face-to-face workshops were delivered. The first was delivered in August 2003. The professional development team traveled north to the Fort Vermilion School Division for an intensive three day workshop. This particular workshop focused largely on assisting the RACOL teachers to develop the technical skills necessary to teach within the Virtual Presence Learning Environments (VPLEs). This workshop also allotted time for the RACOL teachers to practice using and teaching within the VPLEs as well as including structured discussions on pedagogy and the 'community of learners' theory, and its applicability to this new type of teaching paradigm.

In February, 2004, an afternoon workshop was hosted at the University of Alberta for the RACOL teachers. For this workshop, two guest speakers – Dave Trautman and Michael Bussiere - were invited to collaboratively share professional teaching and learning experiences within a video environment. Dave Trautman presented in Edmonton, while Michael Bussiere presented from Banff via videoconference. After the presentations, the RACOL teachers were given an opportunity to collaborate and share experiences with one another and other teachers from Grande Yellowhead school division, which is also working with videoconference teaching.

Both workshops were part of a comprehensive and peer-supportive vision to provide effective, teacher-specific professional development. Monthly videoconference meetings with the RACOL teachers, Fort Vermilion School Division Administrators, and other RACOL employees were also hosted by David Geelan and the professional development team.

### **1.3 Project Results**

There are many methods by which to ascertain qualitative or quantitative data concerning the conceptualization and delivery of the professional development. The methods employed so far include

informal and formal written evaluations, face-to-face interviews with the RACOL teachers, open discussions, e-communications, and questionnaires. Without including an explicit summary of the results here, the general finding is that the RACOL teachers found the professional development successful and effective. Another measure of success lies in the numerous conference presentations and publications that the RACOL professional development team has produced in order to share ideas and lessons learned with the international and local education communities.

### 1.3.1 Deliverable

The development and delivery of a professional development model to help teachers develop and adopt second-generation community of learner models of teaching and learning that exploit the technical capabilities of broadband networks.

### 1.3.2 Design and Outcomes

There are four means through which professional development was delivered to the RACOL teachers. First, there were monthly video-conference meetings. Second, there were pre-arranged face-to-face workshops. Third, the RACOL website was specifically tailored to the professional development needs of the teachers. Finally, e-communication (e-mail, phone, web, videoconference) between the RACOL professional development team and the teachers occurred on an ongoing basis.

### 1.3.3 Achievements/Challenges

Some of the challenges that were faced centered on technical difficulties and barriers due to demographics. For instance, when the August 2003 workshop was delivered, most of the VPLE rooms were not yet constructed and the Alberta SuperNet was still being installed. This caused considerable interruptions to the schedule and agenda of the professional development. Fortunately, the RACOL teachers were sympathetic to the uncontrollable predicament. One teacher commented, "I think that you were sabotaged by the system going down every now and then, and again, I mean, you recognize things that are within and beyond the control... it was organized...and that was within your control. Things happened, that was not within your control".

The other challenge was distance, with the RACOL teachers located in the Fort Vermilion School Division, which is over 800 km north of the professional development team located in Edmonton, Alberta. The use of videoconference meetings partially addressed this challenge.

#### 1.3.4 Lessons Learned

Earlier phases of the professional development program (before David Geelan and Karen Fiege became involved in mid-2003) focused on providing largely web-based 'resources' such as web sites relevant to the specific subject areas being taught, to the participating teachers. It was found that this approach tended not to be perceived as valuable by the teachers, since (a) it required time to evaluate and work with the resources to fit them to their teaching programs, (b) web access at that time (pre-Supernet) was limited, which made it difficult to use online resources in the classroom and (c) the teachers felt that they themselves were more able to identify web resources that would fit with their needs and personal style. For this reason, the professional development program was refocused on relationships, on working directly (including through videoconferencing) with the teachers, and on finding a balance between supporting teachers with technical skills in using the equipment versus support in rethinking their pedagogy to fit the new medium and the 'community of learners' model.

A related issue, that arises in all teacher professional development contexts, is the tension between meeting teachers' perceived needs – what they know they need to know – and the needs that have not yet been identified by the teachers – what they don't know they need to know. This called for a careful balancing act on the part of the professional development team, in order both to be responsive to the needs presented by the teachers, but also to have a vision, grounded in experience and in the relevant literature, of things the teachers need to know but may not perceive as urgent or important. This balance was not always perfectly struck, but paying on-going attention to the tension made it possible to adjust in a dynamic way.

#### 1.3.5 Recommendations

It is clear that professional development is a key part of an initiative such as RACOL. This was an emphasis throughout the project, due largely to Craig Montgomerie's vision of RACOL as an integrated

package of human and technological development. The lessons learned and approaches adopted in the RACOL project have been, and will continue to be, disseminated through publications and conference presentations. While the formal, CANARIE-funded portion of this project has concluded, it is **recommended** that professional development activities continue until the end of the 2003/2004 school year. For succeeding years, professional development activities will be 'owned' to a much greater extent by the Fort Vermilion School Division, and it is **recommended** that those teachers who have been highly successful in teaching in the VPLE mode be strongly involved in the professional development of colleagues who are new to this form of teaching. It is also **recommended** that all teachers involved in VPLE teaching in the school division develop procedures for meeting regularly, both face-to-face and by videoconference, in order to continue their collaborative support for one another's developing knowledge and skills.

#### **1.4 Schedule**

The professional development has been an ongoing process. Major face-to-face workshops occurred in August 2003 and February 2004, as well as monthly videoconference meetings throughout the school year. The official end to the professional development will be the end of March 2004. However, David Geelan and Craig Montgomerie are making efforts to extend the delivery of professional development to the RACOL teachers to at least end of the 2003/2004 school year and possibly for the next two years. This will then assist new teachers coming into this new teaching environment and continue to stimulate professional growth for the continuing RACOL teachers.

##### **1.4.1 Phase Deliverables of the Professional Development Team**

Please describe the actual achievement for each deliverable as described in the Project Agreement.

Build rapport and instigate teacher interchange  
Social outings, including dinner, February workshop  
Listening to RACOL teachers' needs and concerns  
E-communication – between professional development team and RACOL teachers  
Deliver technology instruction and troubleshooting techniques  
August 2003 – three day face-to-face workshop in Fort Vermilion  
February 2004 – afternoon workshop in Edmonton  
Monthly videoconference meetings  
RACOL website – dedicated to placing practical resources for the RACOL teachers to use  
Documentation of the VPLE and various technologies therein

Instruct on distance education pedagogy and the 'Community of Learners' theory  
 Presentations by invited guests  
 Telus2Learn  
 Michael Bussiere  
 Dave Trautman  
 Special presentations by David Geelan

## 1.5 Conferences/Workshops

<b>Conference/ Workshop/Seminar</b>	<b>1.6</b>	<b>Registrat ion Fee (y/n)</b>	<b>Numbe r attendi ng</b>	<b>Audience</b>
Ed-Media 2004 – World Conference on Educational Multimedia (June 21-26, 2004)		Y	Not yet known	T,B,S,E,P, M
Canadian Association of Distance Learning (CADE) (June 01, 2004)		Y	Not yet known	T,B,S,E,P, M
Society for Information Technology and Teacher Education (SITE) Conference		Y	11	T,B,S,E,P, M
Ed-Media 2003—World Conference on Educational Multimedia, Hypermedia & Telecommunications		Y	15	T,B,S,E,P, M
Effective Teaching at Remote Sites Seminar		N	33	T, E
Real Teaching, Virtual Classrooms Sponsoring Agency: ATA Science		N	6	

*Category: CS – CANARIE sponsored conference, NC – non CANARIE sponsored conference, PS – project sponsored workshop/seminar, OW – other workshop/seminar, OT – other, please describe) and number of attendees (indicate if an estimate)*

*Audience: T - technical, B - business, S – Industrial Sector, E – Education Sector, H – Health Sector, P – other public sector, M -Mixed, O – other, please describe*

### **1.7 Publications**

<b>Article title and location</b>	<b>Audience</b>
<b>1.</b> Canadian Stories of Distant Cases: Audiographics Teaching and Learning of High School Physics in the RACOL project (Honolulu, HI)	T,B,S,E,P,M