Summary of the Institutions' Technology Enhanced Learning Reports for Academic Year 2003-04

Prepared by Saskatchewan Learning

INTRODUCTION

Saskatchewan's post-secondary education sector is working together to enhance accessibility and quality through strategic use of technology enhanced learning (TEL). The institutions prepare annual plans and proposals to guide development of their programs and services using technology, which are supported by funding from Saskatchewan Learning and their own resources. Annual reports are prepared to provide information on progress in implementing TEL initiatives, accomplishments and impacts, and emerging issues and trends

This report provides a summary of key information drawn from the institutional reports on TEL activities in 2003-04. It is intended to provide the partners with an overview, with highlights of the institutions' actions to use technology to enhance learning resources and extend course delivery, to offer professional development and support to faculty, and to provide services to learners using technology.

1. OPPORTUNITIES FOR STUDENTS

A. *TEL Courses and Learning Resources Delivered in 2003-04*

- In 2003-04 the institutions delivered a total of 175 online and televised courses and learning resources. As shown in Table 1, this total includes 128 online courses and learning resources, with 82 of these being supported with TEL funding from the province and 46 funded by the institutions. Of the 47 televised courses available in 2003-04, 24 courses were supported with TEL funding and 23 were institution funded.

Table 1: TEL Courses and Learning Resources Delivered in 2003-04

Institution	Delivery Mode				Total
	Online		Televised		
	TEL Fund	Inst'n Fund	TEL Fund	Inst'n Fund	
SIAST	30	29	6	17	82
U of S	27	15	10		52
U of R	19	1	6	2	28
FNU	1	1	2	4	8
SIIT	2				2
GDI/DTI	3				3
Total	**82**	**46**	**24**	**23**	**175**

Note: The courses and learning resources included in the above count may not be equivalent and are not standardized on the basis of credit or instructional hours.

B. *Student Participation in Online and Televised Courses in 2003-04*

- The number of registrations in TEL courses provides an indication of student participation in online and televised courses. In 2003-04 there were over 5700 registrations in online and televised courses as shown in Table 2. Approximately 60% of these registrations were in online courses with the remaining 40% in televised options.

- Almost one half (48%) of the total registrations in 2003-04 are accounted for by students participating in online and televised courses offered by SIAST. This trend reflects the number of online and televised courses available from SIAST in 2003-04.

- Not all institutions reported data on registrations by on- and off-campus, and definitions may vary from institution to institution. From the limited information provided by the institutions, the majority of students registered in online courses are on-campus, although significant numbers of off-campus students participate in these courses. On-campus students also take advantage of televised opportunities, while off-campus students continue to make up the majority of students registered in these courses.

- The number of registrations in televised courses is about the same as in 2002-03. However, registrations in online courses increased in 2003-04 more than 65% from the previous year, reflecting the increase (66%) in online learning opportunities as more courses under development were completed and delivered in 2003-04 (data not shown).

Table 2: 2003-04 Student Registrations in Online and Televised Courses

Institution	Delivery Mode					
	Online Registrations			Televised Registrations		
	Total	*On-Campus	*Off-Campus	Total	*On-Campus	*Off-Campus
U of R	379	178	201	699	261	438
U of S	1098			426	63	363
SIAST	1586	1263	323	1168		
SIIT	122		122			
FNU	230			57		
Total	3,415	1,441	646	2,350	324	801
Total 2003-04 Student Registrations in Online and Televised Courses: 5,765						

Institutions apply their own definitions for on- and off-campus, which may vary.

C. *Opportunities for Aboriginal Students*

- In June 2004 SIIT celebrated the graduation of students from its first online program, Certificate in Aboriginal Employment Development (CAED). Online delivery extends opportunities for Aboriginal adults to access courses that are related to their job or to help them to prepare for job opportunities in their own communities. Students are provided with an orientation to the online learning platform prior to commencing the CAED program. SIIT is incorporating student facilitation and instructional methods that are effective in helping Aboriginal adult students succeed in online courses. The students' response to the online program has been very positive and their success level in the program is high.

- The First Nations University of Canada serves students in communities throughout Saskatchewan and Canada. Making its courses available through online and televised delivery provides First Nations students with more opportunities to access courses in their own communities. The First Nations University of Canada's TEL courses and learning resources respond to professional development needs of First Nations adults and assist in preserving, interpreting and promoting the history, culture and language of First Nations peoples.

- Gabriel Dumont Institute is developing the Virtual Museum of Métis History and Culture, a unique, comprehensive repository of resources available via the Internet to learners, instructors and the public. TEL support has enabled GDI to attract other partners for this initiative.

- Dumont Technical Institute has developed its Métis Studies Adult 10 modules for online delivery in 2004-05. The modules present a Métis perspective on historical and current events and serve to complement Social Studies ABE 10.

D. *TEL Courses Planned for Delivery in 2004-05 and Future Years*

- The institutions' reports included estimates of the number of courses they were planning to deliver in 2004-05. A total of 238 online and televised courses and learning resources were being planned for delivery in 2004-05 as shown in Table 3, including 194 online opportunities and 40 televised courses. The growth in online opportunities reflects the projects funded and initiated in previous years that are now coming to fruition.

Table 3: Estimate of TEL Courses and Learning Resources to be Delivered in 2004-05

| Institution | Delivery Mode | | | | Total |
| | Online | | Televised | | |
	TEL Fund	Inst'n Fund	TEL Fund	Inst'n Fund	
SIAST	46	35	6	11	98
U of S	63	18	8		89
U of R	26		7	2	35
FNU	3	1	2	4	10
SIIT	2				2
GDI/DTI	4				4
Total	144	54	23	17	238

- Online course development is a multi-year process. Since 2000, TEL funding and institutional support for online content development has resulted in the initiation of over 350 projects to produce courses and learning resources for online delivery. Including TEL content development funded in 2004-05, there are 163 online courses and learning resources under development. These courses will become available for delivery in future years, further adding to the array of TEL opportunities for students.

Table 4: TEL Course and Learning Resource Development

Courses & Learning Resources	Development Status		Total
	Under Development	Complete	
TEL Funded Online	154	110	264
Inst'n Funded Online	8	52	60
TEL Funded Televised	1	23	24
Inst'n Funded Televised		17	17
Total	**163**	**202**	**365**

E. Learning Resources

- TEL content development for online delivery includes learning resources as well as courses. There are more than 30 learning resources currently under development or completed. These multimedia resources represent a valuable investment and growing reservoir of source and support material for many courses and programs.

- For example, the new the Virtual Museum of Métis History and Culture, developed by Gabriel Dumont Institute, can be used to support many courses at multiple levels, K-12 to post-secondary. Other institutions are developing online resources to help students prepare for and succeed in their studies, including modules of study and tutorials in areas such as academic preparation, technical orientation, and math, writing and information literacy skills.

- Teams of faculty and instructional designers are developing innovative virtual laboratory exercises and course modules that enrich and extend a wide range of courses and programs in areas such as veterinary medicine, dentistry, nursing, emergency paramedics, computer science, natural sciences and engineering. Faculty are developing digital image banks and resource websites that enhance and enrich courses and programs, including native studies, art, history, education and geography courses.

2. PROGRAM APPROACH

A. *New Program Opportunities*

- The post-secondary institutions are developing courses for online and televised delivery that expand opportunities for students to work towards and complete credentials. The following are some highlights of institutional program offerings as of 2003-04:

  - ➤ SIAST has completed making its Website Design and Development Applied Certificate available completely online along with most of the first year of the Computer System Technology and Licensed Practical Nurse programs. The first year of SIAST's business program is available via televised delivery and SIAST continued its development of second year business courses for online delivery to provide more opportunities for students to complete a Business diploma in the various specialty areas.
  - ➤ The universities continued to develop Arts and Sciences courses for online delivery that, together with televised courses, expand opportunities for students to acquire core credits in Arts and Sciences programs.
  - ➤ The institutions are progressing in making professional certification programs at the undergraduate, post-baccalaureate and graduate levels available online. These include the Human Justice Police Studies program at the University of Regina; the Certificate in Aboriginal Employment Development program at the Saskatchewan Indian Institute of Technologies; Masters level programs in Continuing Education, Education Technology and International Trade, a post-baccalaureate program in Special Education at the University of Saskatchewan; and a new inter-institutional Prairies Studies undergraduate degree program, a collaboration of the two universities and First Nations University of Canada.

B. *More Course Options*

- The post-secondary institutions are also developing online courses that respond to learning needs in a broader range of subject areas. This provides opportunities for faculty in different program areas to become more involved in online development and delivery.

- Table 5 shows the percentage distribution, by subject area, of online and televised courses and learning resources completed and under development from 2000-01 to 2003-04 (includes those supported with TEL funding from the province and funded by the institutions). The distribution reflects the program approach to TEL development, with more than three quarters (80%) of online and televised TEL development concentrated in Arts and Sciences, Health Sciences, Education, Computer Technology and Administration & Business subject areas. At the same time, there is initial TEL development in virtually all of the major subject areas of post-secondary education and training in the province.

Table 5: Distribution of TEL Funded and Institution Funded Courses and Learning Resources by Subject Area, 2000-01 – 2003-04

Subject Area	% TEL Course & Learning Resources
Education	14.5
Health Sciences	13.3
Administration & Business	12.7
Arts & Science/Social Sciences	11.8
Computer Technology and Applications	11.5
Arts & Science/Humanities	6.7
Arts & Science/Natural Sciences	6.1
Health & Community Service	4.8
Trades/Media Focused	3.9
Academic Preparation	3.3
Arts & Science/Fine Arts	3.0
Environmental Studies	2.7
Engineering	1.5
Agriculture & Farming	1.2
Sports & Recreation	1.2
Social Work	0.9
Law	0.6
Total	**100%**

3. TEL INTEGRATION IN THE POST-SECONARDY INSTITUTIONS

A. *TEL Integration in All Courses and Increased Development of Blended Options*

- The post-secondary institutions are enriching and extending face-to-face courses offered on-campus with online components. For example, at the University of Regina the use of online components/learning resources in courses has expanded over the last three years, from 71 courses to 425 courses using WebCT. In 2003-04, the University of Saskatchewan offered 375 on-campus courses that incorporate use of WebCT. SIAST has integrated its online course management system (WebCT) with its student information system for better coordination of learning resources and technical support for students.

- All of the institutions report a trend to "blended courses" – courses that use a variety of technologies (online, televised, multimedia, print) to enrich course content. Blended courses are delivered using a variety of modes, where the focus is both on pedagogy – utilizing technology that best presents the content to the students – and on providing the student with more opportunities to access their courses in ways that best meet their learning and circumstances.

B. Capacity Building and Organizational Development

- The institutions' 2003-04 TEL reports identify their progress in increasing capacity to develop and deliver online courses and learning resources. One indicator is the increasing number of online courses and programs, with a significant number developed without direct TEL project funding.

- This activity is supported by changes within the institutions to strengthen their organizational capacity to develop and manage TEL related programs and services. All of the institutions are implementing organization structures, processes, and strategies including the following:

  - The University of Saskatchewan's TEL plan has been expanded and broadened as part of the new teaching and learning centre identified in the university's Integrated Plan.

  - The University of Regina is implementing a *Framework and Action Plan for Technology Enhanced Learning (TEL)* that is a plan for all types of technology-mediated teaching and learning at the University.

  - SIAST coordinates all aspects of TEL through its Virtual Campus. TEL content development is integrated into the SIAST Business Plan. The Virtual Campus provides support for linking its Campus Pipeline Portal, WebCT course management system and its student information system to create an integrated administration and delivery system for students.

  - The First Nations University has hired a full time TEL coordinator.

  - SIIT is using The Learning Manager system to coordinate institution program planning, delivery and learner support. SIIT's success in implementing TEL development and delivery has been helped through its involvement with the other partners in Campus Saskatchewan.

  - Through development of the Virtual Museum of Métis History and Culture, GDI has forged enduring intra-institutional relationships with the Saskatchewan Archives Board and the University of Saskatchewan, Department of Native Studies and the Division of Media and Technology.

4. **FACULTY DEVELOPMENT AND SUPPORT**

- The institutions have undertaken a variety of activities and approaches to support and engage faculty in technology enhanced learning. The following highlights were reported in 2003-04:

  - ➢ Each SIAST Campus has a Greenhouse where faculty can access trainers who provide support in using technology to develop courses for online delivery, using technology in the classroom and provide Just-in-Time training through drop-in sessions in the Greenhouse.

  - ➢ The University of Regina delivered training and provides instructional design support for faculty through its Centre for Academic Technologies (CAT) and its Distance Learning Division (DLD). One hour training sessions for faculty in the use of Dreamweaver, PDF document preparation, and digital camera use were available through CAT at regular intervals throughout the year. Scheduled sessions through CAT provided information about and showcased online course development and delivery to help raise awareness and promote TEL.

  - ➢ At the University of Saskatchewan over 680 faculty and staff registered in one of more of 30 workshops related to using Dreamweaver, WebCT, PowerPoint and scanners in 2003-04.

  - ➢ Both universities hosted inter-institutional faculty development events and training sessions, sharing "best practices" and extending professional development opportunities among all of the partners. As well as contributing to these sessions, SIIT identified the value of the inter-institutional sessions in providing its faculty and staff with valuable training and contacts in its report.

5. **LEARNER SUPPORT**

- The universities and SIAST are continuing to develop and extend their technical support (Help Desk) services for students.

- SIAST is integrating its Campus Pipeline Portal, WebCT course management system and its student information system to create an integrated administration and delivery system for students. The University of Saskatchewan has begun integration of WebCT with PAWS facilitating access to courses and course calendars and other administration functions for students.

- The University of Regina provides a learner support coordinator for students using technology to take University of Regina courses at a distance and posts information about student support services on the Distance Learning Division website (http://www.uregina.ca/cce/offcampus/).

6. ISSUES AND TRENDS

A. *Issues*

- The universities and SIAST identified that a key issue is the pressure on institutional resources to revise and sustain TEL courses.

- TEL is creating significant pressure for policy development in the area of copyright and intellectual property.

- For untenured faculty, recognition of TEL work towards tenure is an issue.

- SIIT identified pressures related to course design and development for online delivery, including adequate connectivity and technical infrastructure when course content requires interactivity, demonstration or contains audio-video components; lack of human resources limits development of supplementary learning materials in audio-visual or interactive media; lack of resources and availability of Aboriginal instructors result in pressures in meeting the need for trained facilitators to support students taking SIIT online programs.

- Supporting students (especially Aboriginal students) in remote locations to access and participate in TEL courses remains a challenge and a key consideration when extending connectivity and technical infrastructure.

B. *Trends*

- SIAST noted a growing student demand for online services, courses and programs.

- The Visiting Student Application Form has been well received by students and has enabled them to take courses more easily from more than one post-secondary institution.

- Emergence of new data devices such as PDAs and tablet PCs may require a change in content delivery formats and in technical support.

- The University of Saskatchewan noted that through the management of TEL the institution is building internal collaboration and developing new ways of working together (team approach).

7. ACKNOWLEDGEMENTS

Thank you to all the people who worked on the institutions' 2003-04 TEL reports. The reporting process for TEL is an evolving process. These reports provided valuable data about the institution's TEL activities in TEL content development and delivery. At the same time the need for development of consistent definitions for student participation (on- and off- campus) became apparent. Your feedback and suggestions for improvement are sought and most welcome.