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EASTERN TOWNSHIPS
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School Board

PEDAGOGY/TECHNOLOGY INTEGRATION RUBRICS

A means to help teachers and administrators situate themselves on a developmental continuum

August 2005

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The following pages present a continuum in the rubric format to assist educators and administrators alike in their efforts to situate themselves for the purpose of reflection and professional growth. The Eastern Townships School Board's Enhanced Learning Strategy is predicated on the fact that professional educators are at various stages of development in terms of their understanding and integration of technology in the learning context in the classroom. By providing this information to teachers and administrators, professional development activities can be more accurately directed on specific identified needs, focused on what teachers/administrators want to learn. This format also allows for clarity in terms of expectations by outlining destinations in specific areas of growth.

Professional Development and the use of technology in the classroom is particularly complex because the focus of attention is not on technology, but on the improvement of student learning through more effective instructional practices. Education technology not only plays a role in improving learning through instructional practices, it also acts as a catalyst to facilitate change from a more traditional approach to a greater independence for students towards constructivist learning.

No doubt, educators must be proficient in the use of technology tools and have skills in the use of a variety of models of curriculum design and learning strategies. Educators must develop new organizational and management strategies to support innovative learning in a technology rich environment. The expectation is that 6 months after receiving a laptop, a teacher needs to be at least in the "emergent" stage. One year after using a computer in the ETSB teaching environment, teachers should be at the "proficient" stage particularly in the Personal Technology Competencies and Pedagogy and Technology categories. Within 2 years of receiving a computer, it is expected that all teachers would find themselves in a number, if not all, aspects of the "exemplary" stage of competency. Technology can support new collaborative professional practices on an anytime/anywhere landscape.

The genesis of this document, inspired by teachers who want to know what is expected, came from focus groups of educators (administrators, teachers and professionals). The School Board, in its continuing efforts to customize professional development and to encourage reflective practice in all our areas, has responded. Clearly, as we continue to grow in our interactions with the learning/technology environment, these benchmarks will evolve to reflect the changing educational reality of our School Board.

Definitions

The rubric uses four stages to define and demonstrate progress, competencies and behaviour. These stages are defined as follows:

Exemplary

At this stage, technology and learning are integrated in practice. New learning opportunities are possible through the creative use of project-based learning, collaborative interactions and sophisticated computer usage. This practice serves as a model.

Proficient

Technology is thoroughly integrated into the class to support existing practices. Educators have developed skills related to the usages of technology but primarily apply these skills to automate, accelerate and enhance the teaching and learning strategies already in place.

Emergent

Educators are aware of the potential of using technology in the classroom, however, the teaching is relatively unchanged resulting from a lack of confidence on the part of the teacher to explore the possibilities. Some of the requisite skills to implement and sustain changes are lacking.

Beginning User

Technology is perceived as an add-on support in the teaching and learning process. Teachers feel insecure in their knowledge of the basic computer skills and this results in a hesitant use of technology by students.

PERSONAL TECHNOLOGY COMPETENCE

AREA	PERSONAL TECHNOLOGY INTEGRATION RUBRIC	
Basic Computer Operation	Exemplary	I can run several programs simultaneously, and have multiple windows open. I can customize the look and sounds of my computer. I use techniques like shift-clicking to work with multiple files. I feel confident enough to teach others some complex and integrated operations.
	Proficient	I can set up my computer and peripheral devices, load software, print, and use most of the operating system tools like the clipboard, clock, note pad, find command, and trash can (recycling bin). I can connect to my school's network, and run programs that require a CD. I feel confident enough to teach others some basic operations.
	Emergent	I know the basic operations of using a mouse, clicking and working with windows. I can use the computer to open, run and close a few specific, preloaded programs. Computer use has little effect on how I work. I am somewhat anxious I might damage the machine or its programs.
	Beginning User	I rarely use a computer; my knowledge is limited to one application.
File Management	Exemplary	I regularly run a de-fragmentation program on my hard drive, and use a back-up program to make copies of my files. I have a system for archiving files.
	Proficient	I have a filing system for organizing my files, and can locate files quickly and reliably in folders and subfolders. I back-up my files to disk, server or Internet storage site on a regular basis. I use the school's networked file storage server when provided. I save my files with the appropriate extension.
	Emergent	I save documents I've created but often have difficulty finding them. I do not store duplicates of my files on servers for back-up purposes.
	Beginning User	I do not save any documents I create using the computer.

PERSONAL TECHNOLOGY COMPETENCE

AREA	PERSONAL TECHNOLOGY INTEGRATION RUBRIC	
Word Processing	Exemplary	I can save my document as a text document so it can be opened by others who may use the same word processor. I take advantage of collaborative writing/editing environments when available. I use the word processor not only for my work, but have used it with students to help them improve their own communication skills.
	Proficient	I use the word processor for nearly all my written professional work: memos, tests, worksheets, and home communication. I can edit my document using commands like copy and paste, find, undo, and "save as". I can spell check, and change the format of a document. I can paginate, preview and print my work. I can use tables within my documents. I feel my work looks professional.
	Emergent	I occasionally use the word processor for simple documents that I know I will modify and use again. I generally find it easier to handwrite or type most written work I do.
	Beginning User	I rarely use a word processor, nor can I identify any uses or features it might have which would benefit the way I work.
Spreadsheet Use	Exemplary	I can import a spreadsheet into a word processing document or presentation program when needed. I use the spreadsheet not only for my work, but have used it with students to help them improve their own data keeping and analysis skills.
	Proficient	I use a spreadsheet for several professional applications such as keeping a budget or analyzing student data. My spreadsheets use labels, formulas and cell references. I can change that format of the spreadsheets by changing column widths and text style. I can use the spreadsheets to make a simple graph or chart.
	Emergent	I understand the use of a spreadsheet and can navigate within one. I can create a simple spreadsheet that adds a column of numbers.
	Beginning User	I do not use a spreadsheet, nor can I identify any uses or features it might have which would benefit the way I work.

PERSONAL TECHNOLOGY COMPETENCE

AREA	PERSONAL TECHNOLOGY INTEGRATION RUBRIC	
Presentation Software Use	Exemplary	I can link to other programs and to websites from my presentations. I use presentation programs with students in their own information keeping and communication efforts.
	Proficient	I can create my own computer presentations that can be used to accompany a lesson in my classroom. I can use an LDC projection device to display the presentation to a class. The computer generated slides help reinforce or amplify my message.
	Emergent	I can navigate through a pre-made presentation program. I can create a simple presentation using a program's templates or wizards.
	Beginning User	I rarely use presentation software, nor can I identify any uses or features it might have which would benefit the way I work.
Network and Internet Use	Exemplary	Using telecommunications, I am an active participant in on-line discussions, can download files and programs from remote computers. I use the network to share documents with my colleagues for collaborative review and editing. I accept student work sent to me electronically. I use telecommunications activities with my students.
	Proficient	I use the networks to access professional and personal information from a variety of sources including networked CD-ROM reference materials, and the World Wide Web. I have an e-mail account that I use on a regular basis to communicate with parents and other professionals. I have a strategy for analyzing the quality of information I find online.
	Emergent	I understand that there is a large amount of information available to me as a teacher that can be accessed through networks, including the Internet. With the help of the media specialist, I can use the resources on the network in our building.
	Beginning User	I rarely use the on-line resources available in my building, nor can I identify any uses or features they might have which would benefit the way I work.

PERSONAL TECHNOLOGY COMPETENCE

AREA	PERSONAL TECHNOLOGY INTEGRATION RUBRIC	
Student Assessment	Exemplary	I rely on the computer to keep track of outcomes and objectives individual students have mastered. I use that information in determining assignments, teaching strategies, and groupings.
	Proficient	I effectively use an electronic database to keep track of student progress and/or I keep portfolios of student produced materials on the computer. I use the electronic data during parent/teacher conferences.
	Emergent	I understand that there are ways I can keep track of student progress using the computer. I keep some student produced materials on the computer, and write evaluations of student work and notes to parents with the word processor.
	Beginning User	I do not use the computer for student assessment.
Ethical Use Understanding	Exemplary	I am aware of other controversial aspects of technology use including data privacy, equitable access, and free speech issues. I can speak to a variety of technology issues at meetings, to parent groups, and to the general community.
	Proficient	I clearly understand the difference between freeware, shareware, and commercial software and the fees involved in the use of each. I understand the school board policy on the use of copyrighted materials. I know and enforce the school's technology policies and guidelines. I have a personal philosophy I can articulate regarding the use of technology in education.
	Emergent	I know that some copyright restrictions apply to computer software.
	Beginning User	I am not aware of any ethical issues surrounding computer use.

PEDAGOGY AND TECHNOLOGY

AREA	TECHNOLOGY AND PEDAGOGY RUBRIC	
Choice of Instructional Delivery	Exemplary	I continuously try new approaches suggested by research or observation to discover the most effective means of using technology to engage my students and meet curricular goals. I work with a team of fellow teachers to create, modify and improve my practices in this area.
	Proficient	I use a variety of instructional delivery methods and student grouping strategies routinely throughout the year. I can design activities and approaches that both best fit the learning objectives and the availability of the technology available to me. I can use small groups working cooperatively to take advantage of student collaboration.
	Emergent	I have tried units or projects that are student-directed, use small groups, or are highly individualized but I primarily use teacher-directed, whole group instruction.
	Beginning User	I have one or two effective methods of delivering content to my students. I rarely use technology that requires that I change my instructional methodology.
Integrating technology into the assessment of Student Performance	Exemplary	I continuously try new approaches suggested by research or observation to discover the most effective means of using technology to help assess student learning. I work with a team of fellow teachers to create, modify, and improve my work in this area.
	Proficient	I use a wide range of technology-based assessments to evaluate student projects and performances. I can use technology to help create assessment tools like checklists, rubrics, and benchmarks that help the student assess his own performance. I ask students to keep both a physical and electronic portfolio of their work.
	Emergent	I save some student work for cumulative folders and parent conferences electronically, and print some electronically produced student work.
	Beginning User	I evaluate my students using evaluation tools that are not technology-based or technology-supported.

PEDAGOGY AND TECHNOLOGY

AREA	TECHNOLOGY AND PEDAGOGY RUBRIC	
Individualization of Instruction and Educational Program	Exemplary	I provide suggestions about the content and design of the individualized computerized planning and reporting tools.
	Proficient	With the assistance of the student, parents, and appropriate specialists, I create a learning plan for each of my students that is supported by technology. I track the accomplishment of learning goals in the plan using a computerized tool. I use this tool during parent conferences and for school reporting.
	Emergent	I am aware of some of the technologies that can be used to tailor individualization of programs for all students and may be using those set up by others.
	Beginning User	I am uncomfortable using technology to individualize student programs of study.
Fostering Home and School Communications	Exemplary	I use a web page or web interface to provide real-time information to parents about individual student's progress in my class. I formally work with parent organizations to teach parents how to access school information electronically.
	Proficient	I maintain a parent/guardian mailing list to distribute information about what is happening in my classroom. I maintain a classroom web page that has basic information about my classroom and curriculum including study guides, notification of upcoming evaluation, assessment criteria of projects, class expectations, etc.
	Emergent	I send email to parents who request it in response to specific inquiries. I use my school's generic parent/guardian mailing list to distribute messages of general interest.
	Beginning User	I use the traditional methods of communication with the home: telephone, report cards, progress reports and print school or classroom newsletters.
Research and Evaluation of Technology Use	Exemplary	I participate in formal studies of the impact of technology on student learning conducted by professional groups and academics. I have designed such studies as part of my own professional education. I report electronically and in print the findings of my research to other professionals.
	Proficient	I use action research and aggregated data to accurately determine whether the technology and methodology I am using has an impact on how well my students learn and on school climate.
	Emergent	I gather, use, and share anecdotal information and observations about student use of technology in my classroom.
	Beginning User	I have not attempted to determine whether the use of instructional technology has made a difference in my student's learning or classroom climate.

PEDAGOGY AND TECHNOLOGY

AREA	TECHNOLOGY AND PEDAGOGY RUBRIC	
Adaptive Technologies for students with special needs	Exemplary	I provide professional growth opportunities for other teachers in the use of adaptive technologies.
	Proficient	I use technology when appropriate to help students with special learning needs. This includes detailed individualized education plans and specialized communications devices.
	Emergent	I work with students who may bring with them special devices that allow them to work and communicate in the classroom.
	Beginning User	I am not aware of how technology can help students with physical or mental limitations.
Professional Growth	Exemplary	I organize professional growth opportunities for other teachers and feel comfortable teaching other staff members about the use of technology.
	Proficient	I use the Internet and other on-line resources to obtain research, teaching materials and information. I read electronic newsletters and journals to keep current on educational practices. I participate in electronic discussion groups.
	Emergent	My professional growth activities include attendance at workshops and some communication with colleagues.
	Beginning User	I do not use electronic resources for professional growth or communication.
Information Literacy Skills	Exemplary	I am actively involved in curriculum planning teams and advocate for multidisciplinary units and activities that require information literacy skills. I share successful units with others through print and electronic publishing and through conference presentations and workshops.
	Proficient	My curriculum includes at least two information literacy projects. I ask students to use technology to help them share the results of their research with others. I reinforce information literacy skills on a daily basis as opportunities arise.
	Emergent	As a part of my curriculum, I have library research projects, and I support library skills. I am aware that there are electronic resources available to my students.
	Beginning User	I am vaguely familiar with the term information literacy, however, I do not know why such skills are important.

EDUCATION / TECHNOLOGY COLLABORATION

AREA	EDUCATIONAL / TECHNOLOGY COLLABORATION RUBRIC	
Colleague Support	Exemplary	I actively solicit opportunities to share instructional ideas at a board or regional level. I present ideas at workshops and conferences.
	Proficient	I actively pursue opportunities to dialogue and network among teachers on grade level or in the building regarding technology and education issues.
	Emergent	I ask/answer educational technology and curriculum related questions of peers.
	Beginning User	I am uncomfortable discussing technology and education issues with other teachers.
Instructional Planning and Collaboration Skills	Exemplary	I have positive personal attitudes about technology value in the classroom. I have a high standard of technology mastery. I use technology effortlessly as a tool during the daily classroom routine. Student-centered learning is more important than classroom efficiency. I share lesson plans and successful teaching strategies electronically with colleagues.
	Proficient	Much of my classroom technology use is focused on student productivity, problem-solving, and concept visualization. I share successful teaching experiences with others via formal and informal presentations and in-service.
	Emergent	Many of my technology-based activities are aimed primarily at teaching technology use. Students use software such as word processors and databases as part of their direct instruction. My ideas and planning are evidenced by lessons taught.
	Beginning User	I have no documentation of lessons or ideas. I feel lessons that are technology-rich are teacher time consuming.

EDUCATION / TECHNOLOGY COLLABORATION

AREA	EDUCATIONAL / TECHNOLOGY COLLABORATION RUBRIC	
Committee Involvement	Exemplary	I perceive the need of students and other staff, and I create and promote professional development activities. I am actively involved in school/board educational technology planning.
	Proficient	I participate and create staff development activities on committees at a minimum level. I regularly advertise staff development opportunities to others. I am aware of educational technology developments at the school board level.
	Emergent	I am aware of professional development activities and participate based on time. I do not recognize the importance of participating in committees.
	Beginning User	I am not aware that there are committees or have the need for them. I only participate in professional development activities when required.
Modelling technology skills in the classroom	Exemplary	I use multiple delivery methods, including multimedia, simulation, and computer video presentation. I use correct terminology, particularly in computer literacy instruction. Students present their work regularly using technology-based presentations.
	Proficient	I am beginning to master computer vocabulary. I can control video devices and I understand the basic presentation pedagogy. Students occasionally use technology-based presentations for sharing work with peers.
	Emergent	I occasionally use technology to supplement instruction. Visuals follow basic readability rules. Students rarely use technology-based presentations for sharing work with peers.
	Beginning User	I instruct students from the front of the class without the aid of presentation devices. I use a limited technology vocabulary in instructing students.