# Rubrics for Leadership: What Technologically Literate Superintendents, Principals and Directors Should Know and Be Able to do with Information Technologies

Published in The School Administrator, April 1999.

Eric Bartleson, Ph.D., Minnesota State University, Mankato MN <Eric.Bartleson@mankato.msus.edu> Doug Johnson, Mankato Area Public Schools <djohns1@mail.isd77.k12.mn.us>

A long-term technology goal for any school district should be to use technology to improve administrative effectiveness through efficient communication, planning, and record keeping.

Like any large organization, schools can use technology to improve daily operations. Administrative software packages keep student records, figure payroll, generate state reports, and schedule classes. Telephones, voice mail, e-mail, intranets and websites use the power of networking to collect, distribute and update information. Web pages, desktop published documets, and video productions inform our communities about school activities. Administrators can use brainstorming and organizational technology tools to more effectively plan and lead.

Evaluating the impact of technology for administrative uses involves evaluating the cost effectiveness and reliability of data processing. This means looking at the ease of use, minimization of manual data input, and flexibility of report generation. For optimal use of technology for administrative support, districts need to plan for:

- powerful, stable voice, video and data networks that reach into every classroom and office
- shared databases for student data management, finance, payroll, and scheduling accessible from all desktops
- shared calendars and facilities schedulers
- district produced information accessible electronically through websites, listservs, public access television, or desktop published mailed documents

Any communication audit a district undertakes certainly needs to include good questions about how information is shared electronically. Are the technologies available in sufficient quantities so digital formats can begin to replace printed ones? Can we keep our curriculum guides on a school Intranet? Can we replace the daily paper bulletin with a mailing list? Can the information previously delivered to the office by scan sheet now be sent through the network? No cost savings will be achieved until that happens.

But planning for good administrative use of technology also requires that administrators can assess their own technological skills so that they can plan for their own professional development needs.

The rubrics below (modeled after teacher computer use rubrics, see Johnson, D. *The Indispensable Teacher's Guide to Computer Skills*. Linworth, 1998) can serve two purposes. By asking administrators to complete an anonymous self-assessment using the rubrics before a learning opportunity and again after that opportunity, the district can judge the effectiveness of its staff development efforts. These opportunities might include classes, professional growth plans, or workshops. Simple graphs showing the percentage of training participants at each level pre and post training can be constructed. These results can then be shared with the staff development committees and district decision-makers.

The rubrics also serve to provide a "road map" for principals and directors wanting to improve their own technology skills. By examining the specific skills described, administrators know in what areas they need to continue to see additional training or practice.

Below are both the instructions to administrators for completing the self-assessment and the rubrics themselves. Please feel free to use and modify the rubrics for your district's specific needs and as technology changes.

Each of the ten rubrics has three levels:

Level 1: Minimal use Level 2: Mastery Level 3: Advanced

Prior to training, we assumed most administrators will be at level 1, and training efforts should be designed with that assumption. By the end of the training, administrators would be at level 2 or 3 in most skill areas.

#### Self-Evaluation Rubrics for Basic Administrative Technology Use

Please judge your level of achievement in each of the following competencies. Circle the number which best reflects your current level of skill attainment. (Be honest, but be kind.) At the end of the training program, you will be asked to complete the same set of rubrics, which will reflect your level of skill attainment at that time. (Level 2 is considered mastery.) This tool is to help measure the effectiveness of our training program, and to help you do a self-analysis to determine the areas in which you should continue to learn and practice. Keep a copy of these rubrics to refer to during the training.

## 1. Personal productivity

Level One: I do not use a computer or other related information technologies, nor do I expect my office staff to use such technologies. I am not aware of ways that technology can improve my productivity or the productivity of my office staff

Level Two: I use a computer to keep a calendar to which my secretary has access; to track addresses and phone numbers of professional contacts; and to compose professional correspondence. I use technology to do routine tasks more effectively and efficiently which gives me more time for work on long-term goals and major projects.

Level Three: I not only use technology to increase my productivity, but encourage my office staff to do so as well. All correspondence from my office looks professional. All building/district leaders use a shared calendar system for easy scheduling of meetings.

#### 2. Information systems use

Level One: My office staff uses a stand-alone student information system to keep track of basic student data and information needed for district and state reports. Networked access is not given.

Level Two: My office uses a student information system to accurately track student information including parental contact information, grade reports, discipline reports, and health records. The system is used to build a master class schedule. Selected building personnel and I can access the system through the network and use it for decision-making purposes. The system is secure and back-up procedures are in place.

Level Three: Appropriate student information is used by all staff as well as by building leaders. The system is integrated with a district census database that is also tied to finance, transportation and personnel/payroll records. The district information plan has these attributes:

- No data is entered manually more than once.
- All databases allow for easy importing and exporting of information into spreadsheets, graphic packages, word processors, and other databases.
- Electronic data replaces paper when possible, including forms and seldom used or often modified documents, such as policy manuals and curriculum guides.
- All staff members have the skills and access needed to use the system

## 3. Record keeping and budgeting

Level One: I rely on a district system with paper reports for keeping track of budgets, inventories, and other financial records. I keep track of my expenditures in a paper ledger format.

Level Two: I use a spreadsheet or simple packaged record keeping system to track my department or building's budget accounts. It is accurate and kept up-to-date. I can use my accounting system to cross check the district's financial system if discrepancies arise.

Level Three: I use the district's on-line accounting system to track my budget accounts. I can submit purchase orders electronically. I use networked inventory databases to keep track of my building's textbooks, supplies, and equipment.

#### 4. Data use

Level One: I do not use reports or data that can be produced by information systems in the district to help make operational or policy decisions.

Level Two: I can analyze census, discipline, scheduling, and financial data reports produced by administrative systems to spot trends and highlight problems in my building or department. I can communicate the conclusions to staff, parents, and the community in understandable ways.

Level Three: I recognize areas in administration for which additional data are needed for the efficient and effective operation of the building or district and can make recommendations about how that data can be gathered, stored, and processed electronically.

#### 5. Communications and public relations

Level One: I ask that my secretary word-process out-going communications. Telephone messages are hand written. When I

speak to the public, I use overhead transparencies or no audio-visual aids.

Level Two: I effectively use a variety of technologies to communicate with students, teachers, parents, and the public. I can use voice mail and the fax machine. I have an e-mail address and check my e-mail on a regular basis. When speaking, I can use presentation software and the necessary hardware to effectively communicate my message. I use the district's cable television capabilities for public information uses in the school and community.

Level Three: I contribute information and policy advice for our school's web pages. I encourage my staff to use technology to communicate. The public is encouraged to communicate electronically with the school.

#### 6. On-line research and professional development

Level One: I do not use on-line resources to gather professional information or research.

Level Two: I can effectively search and extract information from online resources such as educational journal databases, ERIC, and the Internet. I subscribe to electronic journals with news of professional relevance. I subscribe to electronic mailing lists (LISTSERVs) to gather information and problem solve with fellow professionals. I have participated in satellite delivered educational forums.

Level Three: I understand and can use online interactive communications (online chat or meeting) and have taken classes via the Internet or interactive television.

## 7. Teacher competencies

Level One: I can not identify any specific skills teachers in my school or district should have in order to use technology effectively.

Level Two: Our school or district has a set of technology skills are teachers are expected to master. A formal staff development program that offers teachers a range of staff development opportunities in technology and a means for assessing the effectiveness of those opportunities is in place. Technology and training in its use for teachers has a high funding priority in my school/district.

Level Three: All teachers are expected to use technology to increase their pedagogical effectiveness and integrate high-level technology uses into their classes.

#### 8. Student competencies

Level One: I can not identify any specific skills students in my school or district should have in order to use technology effectively after graduation.

Level Two: My district has a well-articulated and well-taught information literacy curriculum that integrates technology into a problem-solving research process. Students have a wide-variety of opportunities in nearly all classes to practice the use of technology in meaningful ways. Benchmarks for student technology proficiency are written and understood by the staff and public.

Level Three: I serve on curriculum committees comprised of both educators and community leaders that help identify the skills and competencies future graduates will need to successfully participate in society.

### 9. Visioning, planning and leadership in technology

Level One: I let others in my district or school create technology plans. We purchase equipment, software, and technical support on an "as needed" basis.

Level Two: I use software to facilitate brainstorming activities, to plan and conduct meetings, and to create decision-making models. I take an active leadership role in building and district technology planning efforts helping make decisions about hardware acquisition, staff development in technology, and integration of technology into the curriculum. Our school and district have model long range plan and short term goals for technology use that are regularly assessed and updated.

Level Three: I have a leadership role in my professional organization that stresses the effective use of technology in education. I write and speak for my fellow practitioners on technology issues.

## 10. Ethical use and policy making

Level One: I am not aware of any ethical or policy issues surrounding computer use

Level Two: I clearly understand copyright and fair use issues as they apply to information technology resources. I understand the school board policy on the use of copyrighted materials. I demonstrate ethical usage of all software and let my staff know my personal stand on legal and moral issues involving technology. I know and enforce the school's technology policies and guidelines, including its Internet Acceptable Use Policy. I have a personal philosophy I can articulate regarding the use of technology in education.

Level Three: 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 my professional association meetings, to parent groups, and to the general community.