Technology Maturity Benchmarks

The Technology Maturity Benchmarks are based on criteria identified in the Technology Maturity Model and the Stage: Technology. The purpose of this benchmark is to link the technology resources to their use in every learning environment. In this way, the existing level of support for students, teachers and support staff can be determined. The premise is founded on the theory that both resource availability and behavioral changes are required to improve educational outcomes.

The Maturity Model relates to four benchmark stages:

1) The Emergent Stage
2) The Islands Stage
3) The Integrated Stage
4) The Intelligent Stage

It is not sufficient to just acquire technology with the hope it will become used as an essential part of a student’s learning environment. The educational institution, with this benchmark, will be able to assess the progress toward technological maturity over time.

Stages of Technology Use

The **Emergent Systems Stage** is characterized by:

- Lack of formal support when using computing technology for instruction
- No formal plans, policies or procedures exist to ensure the efficient and appropriate acquisition or use of technology throughout the Institution
- Computers are used sporadically throughout the Institution
- Institution wide coordination to ensure grade level and program level access is absent
- Formal support for teacher training is minimal

The **Islands of Technology Stage** is characterized by:

- Regular use of computers at one or more grade levels and program levels at each school within the Institution on a regularly scheduled basis
- Formal plans, policies and procedures exist to facilitate the optimal use of technology in both instructional and administrative areas throughout the Institution
- Institution sponsored and school sponsored training is available
- Technology has budgetary visibility at the Institutional level and school/program level
- The instructional delivery system is somewhat dependent on technology

The **Integrated Systems Stage** is characterized by:

- Regular planned access for students to technology as a means of instruction and a focus of instruction
- Teachers’ systems also support administrative functions, such as grading, attendance and electronic mail
- Technology has a high budgetary visibility at the Institutional and school/program level
- Comprehensive plans, policies and procedures for instructional and administrative use of technology are reviewed and revised regularly
- The Institution is an advocate of technology training for all personnel
- The instructional delivery system is very dependent on technology

The **Intelligent Systems Stage** is characterized by:

- Student access to technology as an indispensable component of instruction
- Every curriculum is augmented by intelligent learning systems
Student, teachers and stake holders have access to appropriate systems from home
Technology is one of the three highest expenditures of Institution funds
Technology planning is an integral part of Institution planning
The systematic adoption of new technologies is ongoing
Technology advocates at each organizational unit assist in the introduction of the new technologies
Instructional and administrative personnel are knowledgeable in the use of technology

Maturity Model

The Maturity Model Benchmark Impact Table provides a means of analyzing the impact of technology efforts on specific components of the organization. Five key areas of the organization are identified: Administrative, Curricular, Support, Connectivity and Innovation. Each area is an important ingredient in attaining high levels of technological maturity.

Technology projects can focus on a key area such as curriculum to achieve a specific objective.

The five areas, taken one at a time, become an organizational filter. Each filter facilitates drilling down into a specific area for analysis. The technology planner can evaluate organizational strengths by each area and tune the application of resources to promote the objectives of the technology plan.

Administrative Filter
The Administrative Filter is composed of Policy, Planning, Budget and Administrative Information criteria. High levels of maturity in this area are most reflective of resource availability and the behaviors of Administrators and Staff. This is indicated in the Maturity model Impact table. Projects that focus on this area will impact Administrators and Staff the most.

Curricular Filter
The Curricular Filter is composed of Curriculum Integration, Assessment, Teacher Use and Student Use criteria. High levels of maturity in this area are most reflective of resource availability and the behaviors of Teachers and Students. Teachers indicated in the Maturity model Impact table. Projects that focus on this area will impact Teachers and Students the most.

Support Filter
The Support Filter is composed of Stake holder Involvement, Administrative Support, Training, and Technical; Infrastructure Support criteria. High levels of maturity in this area are most reflective of resource availability and the behaviors of Teachers and Support Staff. Projects that focus on this area will impact Teachers and Support Staff the most.

Connectivity Filter
The Connectivity Filter is composed of Local Area Networking, District Area Networking, Internet Access and Communication Systems criteria. High levels of maturity in this area are most reflective of resource availability and the behaviors of all segments of the institution, including the community. Projects that focus on this area will impact all segments of the institution.

Innovation Filter
The Innovation Filter is composed of New Technologies and Comprehensive Technologies criteria. High levels of maturity in this area are most reflective of resource availability and the behaviors of Teachers and Students. Projects that focus on this area will impact Teachers and Students the most.