

UNM Virtual Classroom Technology Support Standard

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Effective Date:

Responsible Executive: UNM Chief Information Officer (CIO), Vice Provost for Academic Affairs

Responsible Office: UNM CIO

Contact: IT Director, Classroom Technologies, IT Director, Extended Learning

Purpose of the Virtual Classroom Technology Support Standard

The purpose of this standard is to serve pedagogy by ensuring the deployment and support of the learning management suites of technology used in virtual classrooms. The standard enables reliable technology-enabled teaching and synchronous and asynchronous learning environments, reduces total cost of ownership for individual departments through volume purchasing, and defines roles for effective collaboration and service to instructional faculty. Virtual classrooms may occur inside or outside a physical classroom, online, or in blended approaches using both synchronous and asynchronous virtual classroom activities.

Departments that have existing virtual classroom technology systems are not required to adopt any specific virtual classroom technology system. Departments are required to meet the virtual classroom technology support standards outlined here, and they retain control and accountability for their virtual classroom technologies. At time of implementation or renewal, departments are advised to consider the following:

- 1) Costs (one-time and recurring) – total cost of ownership and costs per user
- 2) Support, documentation and training for instructors and learners using the technology
- 3) Salary and training for technical staff (student or professional) supporting the technology
- 4) Scalability of the technologies to the enterprise
- 5) Functionality – capabilities and limits of hardware, software and the network

What is Virtual Classroom Technology?

A virtual classroom is a network and technology-enabled and managed learning environment that allows participants to communicate with one another, view presentations or videos, interact with other participants, and engage with resources in work groups. The environment can be web-based and accessed through a portal or be software-based and could even require a downloadable executable file. Virtual learning can take place synchronously or asynchronously.

Examples of Virtual Classrooms – UNM Learn is the most-used virtual classroom technology in use at UNM. Other examples at UNM of virtual classrooms include Learning Central for staff training, Moodle, and Campus Clarity hosted software for safety training. See the Extended Learning (EL) Service Catalog (<http://newmedia.unm.edu/service-catalog/distance-education-classrooms.html>, or <http://extendedlearning.unm.edu/>).

Who is affected by the Virtual Classroom Technology Standard?

This Virtual Classroom Technology standard applies to any UNM organizational entity (i.e. college, branch, school, department, business unit, or other UNM affiliated organization), hereinafter referred to as a “department”, that intends to implement, or has implemented virtual classroom technology. All departments that provide

infrastructure and support for these electronic environments need to adhere to the same standard. All faculty, staff and students who use the virtual classroom environments are also affected by the standard.

Scope of the Virtual Classroom Technology Standard

The standard addresses the following Supplemental Services named by the IT Strategic Advisory Committee:

- Learning Management Systems
- Other Academic Support Services
- Test Scoring (including online proctoring, UNM Learn, and quiz delivery systems)
- Instructor Evaluations

Overlap in these services provides the reasoning behind the grouping. There is also overlap with the Classroom Technology standard, which addresses physical classrooms.

Given the nature of virtual classrooms and the potential for wide use by the campus community, the standard assures continuity, reliability, and sustainability of support resources on both the instructional and learning experience sides. The standard addresses many specific technologies and services, such as those listed below, in various ways they can be used in instructional settings.

- Learning Management Systems, extensions & related technologies used for delivery or classroom material
- Audio Capture Systems
- Video Lecture Capture
- Classroom Workstations
- Virtual Classroom Equipment Check Out
- Computer Classrooms
- Distance Education Classrooms – for instruction and learning
- Online audio upload and delivery
- Online video upload and delivery
- Chat or messaging
- Online tests and quizzes
- Assignment delivery and management
- Web conferencing
- Group collaboration tools
- Access to the UNM wired or wireless network

Virtual classrooms include academic, administrative training environments.

Excluded from the scope of this standard: This standard does not address MOOC support or support of technologies delivered in UNM facilities via partner institution's LMS or virtual classrooms, such as are used for graduate work or community college courses, like Skillupnetwork (<http://www.skillupnetwork.org/>).

Responsibilities

- **Office of CIO:** Ensure currency, correctness and appropriate periodic review of the Standard by facilitating review and update of the standard as needed.
- **Office of the Provost / Academic Affairs:** Facilitate the development and publication of technical requirements and specifications for technologies used in virtual learning environments in order to best support pedagogy. (Learning Environments Design Guidelines (LEDG) referenced)
- **Departments that provide Virtual Classroom Technology:** Support virtual classroom services according to this standard.

Process for Review of the Standard

The process to review and update the standard is defined and published on the Standards page of the CIO website at <http://cio.unm.edu/standards/standards-development.html>:

- Standard will be reviewed annually. Also, requests for review and update of the standard can be submitted to the Office of the CIO who facilitates updating the standard. The CIO may independently, or upon request of the administration, also determine if review and update is appropriate for the standard.

Compliance

- This standard has been developed under and is subject to all UNM policies, some of which are cited in the References.
- The UNM Administration, Internal Audit, or UNM IT may determine the compliance of departmental support approaches with this standard.

Virtual Classroom Technology Standard Specifications

Technology and Upgrades

- Meet requirements specified by the Provost to support virtual learning environments, as defined in the LEDG document.
- Ensure that systems can securely integrate or exchange data with other UNM academic systems for a cohesive instructional and student experience. Examples of these systems include, but are not limited to UNM LEARN, Student Information System or Banner.
- Document requirements and technology selections for discipline- or application-specific technology that is outside the LEDG specifications (such as in performance spaces, labs, etc.).
- Consider ADA compliance in the physical space, and address ADA technology requests as they become known, such as captioning or assisted listening.
- Ideally, upgrade technology during semester breaks, when environments are offline or in low use, so that instruction is minimally impacted. Document exceptions and obtain concurrence of faculty instructors using the technology.
- Consult with UNM IT, which provides the Enterprise Wired and Wireless Network service, to determine capacity for new virtual technologies.
- Co-advocate for financial support to underwrite upgrades to the UNM Network that supports virtual classroom technologies.

Distance Education

Systems supporting Distance Education must meet all compliance requirements related to New Mexico's affiliation with the National Council for State Authorization Reciprocity Agreements, and should aspire to satisfy the technology rubric specified in the Online Learning Consortium's Quality Scorecard, as follows:

1. A documented technology plan that includes electronic security measures (e.g., password protection, encryption, secure online or proctored exams, etc.) is in place and operational to ensure quality, in accordance with established standards and regulatory requirements
2. The technology delivery systems are highly reliable and operable with measurable standards being utilized such as system downtime tracking or task benchmarking.
3. A centralized system provides support for building and maintaining the online education infrastructure.
4. The course delivery technology is considered a mission-critical enterprise system and supported as such.
5. The institution has established a contingency plan for the continuance of data centers and support services in the event of prolonged service disruption.
6. Faculty, staff, and students are supported in the development and use of new technologies and skills.
7. Whether the institution maintains local data centers (servers), and/or contracts for outsourced, hosted services or cloud services, those systems are administered in compliance with established data management practices such as the Information Technology Service Management (ITSM) standards which include appropriate power protection, backup solutions, disaster recovery plans, etc.

Support

- Provide clear technical support contact information for those using the environments.
- Provide 24x7 technology support mechanism for distance education students and asynchronous learning.
- Provide information on obtaining permission from the provider to use or access virtual classroom technologies.
- Support requirements needed for UNM's State Authorization Reciprocity Agreement compliance
- Make a best effort to achieve **target** 5-minute response time to faculty requests for help during an in-class synchronous session, in order to have minimal impact on instructor and student time. For best results, instructors should coordinate the time of the synchronous activity in advance.
- In asynchronous environments, provide a mechanism for addressing usage anomalies or end-user problems.
- Document, track and report on incidents and service requests.
- Document triage scripts, work-arounds and backup plans; and provide hot spares for timely resolution of technology issues.
- Document and make easily available usage policies or guidelines for users of these technologies.
- Provide training for faculty and instructors using virtual classrooms.
- Provide technical training for staff supporting the technology for faculty.
- Invite and champion instructional faculty input into requirements for technology or support in classrooms.
- Collaborates with other service providers to limit duplication of effort.

Infrastructure

- Comply with the Data Center Standard for the physical security of servers.
- Retain data for two years/six semesters following completion of a course to support instructor reuse of course materials, and Registrar processes for student grade petitions.

Security

- Secure protected information for access, use, transit or storage.

System demise

- Obtain input from instructional faculty and technology support staff on the timing of demising or taking a system or technology off-line.
- Follow UNM Property Management and Disposition of Equipment Policies cited below for asset management practices.

References

- Learning Environments Design Guidelines (LEDG): http://iss.unm.edu/PCD/docs/Guidelines_Standards/0-LEDG-v.1.0-120224.pdf
- **UNM Policy Manual Section 2500-2599:** Electronic Management Systems, especially 2500, Acceptable Computer Use: <http://policy.unm.edu/university-policies/2000/2500.html>; 2550 for Information Security: <http://policy.unm.edu/university-policies/2000/2550.html>; and Security Controls and Access to Sensitive and Protected Information 2520 <http://policy.unm.edu/university-policies/2000/2520.html>
- University Counsel advises on **Copyright & Fair Use:** <http://counsel.unm.edu/resources/copyright-matters.html>
- **Accessibility/ADA guidelines** are offered by Accessibility Services for students <http://as2.unm.edu/>, and the Physical Plant <https://iss.unm.edu/PCD/university-planning/facility-access-ada.html>.
- **Data Governance** <http://data.unm.edu/>
- **FERPA.** Guidance for complying with the Family Educational Rights and Privacy Act (FERPA) are provided by the Registrar: <https://registrar.unm.edu/privacy-rights/ferpa.html>.
- **Grade Petition Procedure:** https://registrar.unm.edu/forms/Grade_Petition.pdf
- **Extended Learning Service Catalog, UNM Learn:** <http://newmedia.unm.edu/service-catalog/unm-learn.html>, or <http://extendedlearning.unm.edu/>.
- **Extended Learning Service Catalog, Distance Education Classrooms:** <http://newmedia.unm.edu/service-catalog/distance-education-classrooms.html>, or <http://extendedlearning.unm.edu/>.

- To learn more about what Virtual classroom Technology is, start with these resources:
 - a. Online Learning Consortium (OLC). <http://onlinelearningconsortium.org/>
 - b. WICHE Consortium for Higher Education Technology (WCET). <http://wcet.wiche.edu/>
 - c. The New Media Consortium (NMC). <http://www.nmc.org/>
 - d. The Educause Learning Initiative (ELI). <http://www.educause.edu/eli>.
 - e. Association for Talent Development (ASTD). <http://www.td.org>.
 - f. International Society for Performance Improvement (ISPI) <http://www.ispi.org/>.
 - g. Association for Educational Communications and Technology (AECT). <http://www.aect.org/newsite>.
 - h. International Board of Standards for Training, Performance and Instruction (ibstpi). <http://ibstpi.org>.
 - i. National Council for State Authorization Reciprocity Agreements. <http://nc-sara.org/>.

Appendix A – Academic Technology Glossary

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