Teaching-Learning Model for Distance Education

March 12, 2000
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Purpose of the Teaching-Learning Model

The purpose of this document is to provide extensive information on a teaching and learning model that will be used in Education to develop distance learning courses. This is a principle-centered document about the distance education teaching-learning model. It is based upon a review of the general literature of distance learning, research in distance learning, the campus teaching-learning model, and practice and methods that are considered to be excellent and state of practice for distance learning.

The primary principle of this model is that it is learner centered and based on instructors who are able to skillfully facilitate learning.

It is the purpose to expand, adapt, and enhance an educational model to incorporate the unique attributes of teaching via educational technologies.

Distance education is considered to be mainstream. Courses will not be positioned as alternative methods of providing courses.

Each part of the TLM is further defined for the following groups for implementation to meet the needs and distribution/delivery methods for their audiences.

- Graduate
- Professional Development
- ELC - Electronic Learning Communities
Audiences

The TLM audiences and responsible staff members are as follows:

1. In service teachers (K-12)
   a. Academy groups who receive a stipend to attend class
   b. Focused group for whom schools will pay the fees
   c. Open enrollment - LearnNet
      Move is toward totally open distance learning
      Students will be reimbursed for fees
      Students will personally pay fees

1. Graduate Courses for Credit
   a. Pre-service teachers
   b. In-service teachers
   c. Non-teachers

1. Instructors:
   Creating courses
   a. Any Division of Education
   b. Professional Development for Instructors

1. User Groups/End User Training
   Non-teacher participants
   Electronic Learner Communities
Curriculum Development

Distance education requires distance education curriculum. Curriculum designed for alternative delivery systems must be developed, reviewed, and summative evaluation and revise the course based on the evaluation. The teaching-learning model drives curriculum for all types of delivery and learning environments.

Curriculum Review –tested and reviewed by a team of faculty/colleagues. First time the course is offered online is the pilot. There will be limited numbers of students and reviewed by all faculty who developed it.

Curriculum development will be centralized. Teams of designers, content specialists, and media specialists will be assigned to develop a course.

Courses will be developed in such a way that multiple faculty members will be able to use the materials developed for the course in the same way that multiple faculty members are able to use the same textbook. This does not preclude a faculty member adding material to use to individualize the course when they teach it.

Department chairs may be asked to assign a content expert to the development team. The content expert will be expected to meet with the department instructors to represent the collective best practices of the content area. This is necessary because it is prohibitively expensive to produce five versions of the same course.

Any University will own the rights to the course and control the use of the course and materials developed for it.

Faculty members will not customarily be paid a stipend to develop the course.

Faculty will not own the course.

Royalties will not be paid to faculty.

Courses will be developed with the explicit understanding with divisions and faculty that the course will have multiple faculty members using the materials.

The materials can be used in stand-alone distance learning courses or they can be used to enhance, enrich, or augment face-to-face courses.

Development of courses will be modular. As such courses can be modified when there are changes or improvements in the content field that need to be reflected in the content materials.

Refinements for specific audiences:

- Graduate: no additional requirement
- Professional Development: no additional requirement
- ELC: no additional requirement
Technologies

Philosophy  We are devoted to meeting the access and professional development needs of targeted audiences, however, courses will not be designed to lowest common denominator and will have options to allow development of more sophisticated technology components as appropriate for content and as funds allow.

We are committed to offering options for a course so that the technology can be customized to the different audiences.

IMS  The Instructional Management System will provide/set standards to be followed.

Video  Video technologies will include but are not limited to the following
  Broadcast: (1 way) satellite
  Cable
  Two-way interactive video conferencing or multipoint
  Quick Time software to play short clips on the Internet or on computer
  Streaming Video delivered over the Internet
  Video Tape which can be used in the classroom, checked out of a library or purchased by the student
  Cable Modems have the capacity to increase the flow of video
  DSL  Bell Atlantic and other telcos are providing DSL which increases available bandwidth at the home

Audio  Audio technologies are frequently underutilized in distance learning, yet they provide a low technology, efficient, and inexpensive means of delivery for discussions, or conferences which a student must miss. The popularity of talking books should be assessed. Distance education students faced with a long commute, or frequent flights could audio technologies easily just by purchasing a Walkman cassette player and headphones.

  Tape  Audio tape for a variety of talking content
  Tape  Audio tape to capture live conferences
  Tape  For students who do not learn well by lecture and who would benefit from the ability to play a tape many times
  Audio Conference:  Telephone audio conferences
    One way, two way, multiple points
  Software management tools for audio
  Streaming Audio on the Internet
  Radio  Used as an early method of distance learning and could be again
  Lectures

Text  The common text and textbook are being transformed digitally
  Handouts
  Textbooks and Books
  URLs/Internet delivery of information and articles
  e-mail over the Internet
  Attachments – for pictures and other material, including text
  Internet – provides a path for assessment and testing
  Whiteboards – Internet based or classroom based
  Interaction via discussions
Papers and Projects – via word processing and delivery on the Internet
Lecture – reduced to text
Lecture or other verbal content transcribed and reduced to text.

CD ROM
  All Media
  Interaction
  All formats

DVD  A highly interactive medium with great capacity that is just beginning to be
  used by the education market.

Simulations/VR
  VRML – Virtual Reality Mark UP Language
  Military has advanced applications
  Medical has advanced applications

Application and/or Equipment
  BlackBoard Software (new Enterprise Software – Oracle and Blackboard)
  “Tapped In” (SRI)
  Chats threaded discussion
  Digital Cameras
  Video Cameras
  Graphics still stores
  Graphics and overhead projectors such as Elmo
  Animation software
  Web Browsers – video.com
  Internal tour
  White Board – Smart
  Cold fusion - interactive development environment
  Administrative
  Application sharing
  Database – Sequel or Access
  Groupware – Ventana Group Systems

Assistive Technologies
  Blind – Screen readers
  Deaf – Audio
  Closed Caption
  ADA – regulations and requirements for closed captioning
  Role Modeling
  Will meet the Bobby and Class assistive technologies requirements

Other Technologies
  As other technologies are invented and become stable, we will review them
  for appropriateness and adoption into the media mix.

Refinements for specific audiences:

  Graduate:  no additional requirement
  Professional Development:  no additional requirement
  ELC:  no additional requirement
University-wide Representation

Administrators, staff, and faculty need to be proportionately represented on University-wide committees, faculty groups and academic governance to ensure program integrity. Distance educators must maintain an active role in curriculum and policy issues so that differences required for implementation will be accommodated and that distance education is not unfairly discriminated against or labeled as alternative or somehow different than other educational venues provided by the University.

Refinements for specific audiences:

- Graduate: no additional requirement
- Professional Development: no additional requirement
- ELC: no additional requirement

Faculty

Faculty who are chosen to facilitate courses for credit will hold an earned master’s or doctoral degree from a regionally accredited institution. They will have a minimum of two years experience, and it is preferred that they have a minimum of five years, of professional experience in the field in which they will facilitate a course.

Faculty will receive extensive professional development and mentoring so that they are able to be role models of facilitative teaching techniques and of distance learning best practices. They will have or develop a high comfort level with technology and be able to easily integrate it into every aspect of the distance learning class or use the materials to easily integrate the course materials into a face-to-face class for enhancement.

The faculty assessment, internship, training and evaluation is critical to them in making the transition from a stand-up, face-to-face teaching environment to one that is conducted through media. This training must be focused on practices and techniques appropriate for the media as well as on subject are as determined by the University.

Faculty will be able to evidence an ability to evaluate student performance in a distance learning environment.

Faculty are available to students outside of the distance education learning environment. Appropriate policies include having instructors respond to students within 24 hours for urgent personal matters (to their personal e-mail), that course materials be graded and posted with feedback within a week after the assignment due date.

Faculty or teaching assistant will log on to check messages and interact 5 out of 7 days. Saturday and Sunday will be days that the faculty logs on as these will be the most heavily used days for students.

A teaching assistant will be assigned to support the instructor who teaches online courses.
Faculty as Members of the Development Team

Faculty may be part of a team chosen to design a course. The faculty member will provide the content expertise and the staff will provide the instructional design and media expertise as well as the production of materials for the course.

Faculty Professional Development for Facilitation of Courses

Faculty will go through a period of professional development based on an assessment of their skill set in facilitating online or other distance learning courses. This will include working in the software environment and developing an ease with the software, work in determining student learning styles, multiple intelligences, self-directedness and independence. They will also work on instruments that will determine their personal levels in these areas.

A faculty skill rubric will be devised to determine the faculty member’s level of skill, and an individualized period of study will be conducted by the faculty member. The faculty member will go through an authentic assessment to determine if the skill set is developed sufficiently to facilitate.

Before facilitating a distance learning environment, faculty will observe classes facilitated by experienced distance learning instructors. This will occur concurrently with professional development.

An experienced faculty mentor will be assigned to the facilitator for the first distance learning course. It will be the mentor’s responsibility to determine that the class is properly conducted according to standards of excellence. The mentor will advise the facilitator of techniques, possible problems, and provide other interventions in private e-mail, telephone, or face-to-face meetings with the facilitator.

After the course is completed, the mentor will write an evaluation based on a rubric of skills and other indicators which are believed to define excellence in distance learning facilitation. The mentor will determine if the facilitator is ready to move from an introductory position to that of a full distance learning facilitator. If the mentor determines that there are problems, the significance will determine whether the facilitator will be invited to facilitate a second and final course.
Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

**Student Orientation Process**

When students are admitted to the program, they will be provided with all the information needed to connect to the learning environment. Prior to the start of the first class, students become familiar with the system through an orientation. Group members become acquainted through an exchange of professional and academic backgrounds.

Students will receive an extensive introduction to distance learning. The introductory course will cover the distance learning media, how to work in this new environment, software system introduction and practice, instruction in collaboration, study groups, case studies, and other instructional design practices which they will encounter in the distance learning environment.

The course will include instruments that will help them determine their learning styles, multiple intelligences, students will receive additional work to help them determine their level of self-direction and independence in constructing their learning experiences in an online environment. English proficiency, mathematics, or other content specific competencies necessary to work successfully in an online environment will be evaluated and remediation provided where necessary.

Students will also have extensive information about how facilitation of a course changes the role of the instructor and thus the role of the student. Students will receive information about what is expected of them in the facilitated environment and the new duties of the facilitator.

A student skill competency rubric will be devised and it will be expected that students will be able to perform successfully on an authentic assessment of their skills.

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement
Student Support

Support will be available to students from academic, and technology staff on a 24 hour, seven day a week basis. This includes the following specific positions which are mandatory while a student is enrolled in a class:

Access to staff member from 7 AM to 10 PM by telephone
Access to staff member voice mail 24/7
Technology help desk 24/7 (centralized is preferable)
Access to the instructor by telephone during office hours, minimum three days per week
Access to the instructor by telephone as necessary and possible

Refinements for specific audiences:

- Graduate: Cell phone and/or beeper for contact after hours
- Professional Development: Cell phone and/or beeper for contact after hours
- ELC: no additional requirement

Student and Faculty Software/Hardware Recommendations and/or Requirements

Students and faculty must be adequately prepared to use technology in their courses.
Software/hardware recommendations have been established. Because technology changes rapidly, it is anticipated that the minimum software/hardware recommendations will be reviewed and changed at least yearly.

It is strongly suggested that students and faculty have the following minimum computer configuration in their office, home, or access five times a week.

Students and faculty who do not meet the minimum technology requirements or who use other software and hardware, will still be expected to meet the minimum technology competencies and provide content that is easily usable for all in the class.

Pentium or equivalent, using operating system Windows 95 or higher
Macintosh PPC using operating system 9.0

MS Office preferably the most current version
MS PowerPoint
MS Word
MS Excel (as necessary for specific courses)
MS Project (as necessary for specific courses)
Anti-virus application
Compression software such as Zip or Stuffit
Internet service provider (ISP) account with appropriate software and browser
E-Mail
Additional software may be required for specific courses.
64MB RAM
4 GB hard drive
56k baud modem
CD ROM
Inkjet or laser printer

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

Software Platform

While other software may be reviewed, it will support only one learning environment software platform at a time.

Blackboard will be the system that is supported.

Pilots on other platforms reduce the ability of the technical staff to support the existing platform, and more importantly, the students who are taking courses on it. Pilots are best tested and reviewed when other systems and vendors are supporting the work.

The Blackboard platform is robust and able to support a variety of media. Faculty Instructional designers will design courses that use all of the abilities that the software provides. Courses that are only text based meet the needs of the student who has a primary learning style that is text based. Other learners’ needs are not met.

It will move toward the NT platform along with the entire graduate division and will move as quickly as the division does.

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

Student and Faculty
Minimum Technology Competencies

Basic competencies are considered to be typing, using word processing software, saving files, playing QuickTime movies, downloading graphics, using browser software such as Netscape, using virus protection software, maintaining the equipment so that it is usable and not used frequently as an excuse for late work or non-participation.

Be able to easily navigate on the World Wide Web, use search engines, and locate research materials as required by any course.
Be able to locate and access course materials in the software provided/required for the course

Be able to skillfully use e-mail and attachments of files to correspond with students, faculty, staff and others as necessary to successfully complete the course.

Complete, send, and receive assignments to faculty or other students using e-mail and attachments/files and compression software if necessary.

Use electronic libraries or the Internet for course required research

Prepare and conduct presentations in the distance learning environment using software such as PowerPoint, Chat, whiteboards or other types of presentation software and technologies as they become available.

Use the appropriate software/hardware for the course shown in the minimum technology requirements.

Use CD ROM’s to complete course requirements as necessary

Use an appropriate anti-virus application to ensure the files transmitted and received are virus free.

Refinements for specific audiences: Possible assignment with PT3 Grant

| Graduate: | no additional requirement |
| Professional Development: | no additional requirement |
| ELC: | no additional requirement |

**System Availability**

The system will be available to students seven days a week, 24 hours a day. Many students who are working adults will do the majority of their coursework on the weekend or late at night. Technical support will be available to them when they most need it on a 24/7 schedule.

Planned system installations and retrofitting will be scheduled and the students/faculty notified at least one week ahead of the time the work is to be performed. Systems will not be taken down during known busy periods which may be weekends for credit course students.

Refinements for specific audiences:

| Graduate: | no additional requirement |
| Professional Development: | no additional requirement |
| ELC: | no additional requirement |
System Services

The system will act as an instructional management system for the institution, faculty, students, and staff. Wherever possible, services will be provided electronically to all stakeholders.

An objective is that students will be able to do the following online;

- Review course catalogs and schedules one year ahead
- Register for courses at least one year ahead
- Pay tuition online through debit, credit or fund transfer
- Counseling and filing for financial aid
- Order and pay for books through debit, credit or fund transfer
- Set up meetings with enrollment and other counselors
- Meet with counselors
- Conduct all coursework
- Have Internet access
- Have access to electronic libraries provided without fees
- Receive grades
- Review transcripts
- Receive personal mail
- Talk to a technical support person within 30 minutes of a problem report
- Secure commerce and confidential system

Refinements for specific audiences:

- Graduate: no additional requirement
- Professional Development: no additional requirement
- ELC: no additional requirement

Confidentiality and Other Legal Issues

The system will be maintained by an employee who will maintain the confidentiality of the system and any messages which might be read in order to determine problems with the system and ensure that the system is operating properly.

Your organization maintains the right to monitor the system to verify appropriateness of use.

In the case of grade disputes, charges of academic dishonesty such as plagiarism, grievances of other types, only a small group of administrators may review the archives of the class meetings. These include the academic affairs vice president, the director, and the University President. (alter this to include the Dean)

There are activities that are illegal and are expressly prohibited on this system. These include, but are not limited to:

- Messages that by community standards are deemed to be slanderous or offensive
- Pornographic messages, photographs, are sending such addresses
- The exchange of stolen billing numbers for long distance charges
- The distribution and sale of pirated software
These messages will be removed from the system, the originators will be denied system access, and may be permanently suspended from system use.

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

Validation of Student Enrollment

Students will enroll themselves in the online courses.

When necessary, students may be required to identify themselves in a specific method to ensure that the person enrolled for the class is the person doing the work or taking a test. Students may be required to provide identification that could not be immediately provided by another person.

Security systems such as this should be established at the system level rather than encouraging individual instructors to set class-specific parameters.

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

Informing Students about Legal Issues and Expectations

Students should be informed in a handbook about all legal matters which may impact their academic career. Clear expectations and definitions should be written about plagiarism, other forms of cheating, purchasing written reports from services, having others write assignments/papers, or borrowing the work of others. It is anticipated that the majority of these issues are already covered by JHU policies and need only to slightly edited to meet electronic delivery needs.

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement
Student to Faculty Ratio

Distance education environments are sensitive to class size. To provide small groups, the following ratio of 24-6-3 will be maintained:

24: Class size will be 24-30 students assigned to one facilitator
6: Discussion groups will be comprised of 4-6 students
3: Project groups will be comprised of 3-5 students

Discussion and project groups will be a regular weekly component of courses.

Orienting distance education facilitators and students to self-direction and independence is a positive academic goal. As students move toward the goal, the teaching load is diminished as students take more responsibility to run the class and meet their learning needs.

Ratios may change for other groups.

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

Learning Cohorts

It is expected that for some programs, learning cohorts will be established and students in the cohort will work through all the courses in the program together.

While this may be an expectation, an additional expectation is that a student joining a group may feel that he/she is an outsider. Facilitators should act as hosts for the new student.

Students may also wish to leave a cohort that they feel does not meet their learning needs. This is permissible so long as other courses are available and a change is made prior to the start of a new course.

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement
Study Groups

It is the purpose of the study group to encourage collaboration, teach negotiation skills, and promote effective relationships among members. Study groups meet to collaborate and provide problem solving for assignments. It is a valued in the teaching learning model.

In asynchronous distance learning, decision-making takes longer and is more cumbersome. The small group can conduct the process in a shorter period of time. Shared projects, case studies, and reports will integrate the projects into the group for final discussions.

Other methods should be used for the study group. Groups of two might be assigned. The members of the group might reach out to their own workplaces to involve others in a necessary task.

Whenever possible, the work should be reality based so that assignments are not rigid but have a fluidity that meets the needs of the students in a real workplace.

Directed study students have little or no opportunity to interact with other students. It is possible however, to design assignments for them which require involvement with a group through their place of work.

To ensure a work area for the study group, a conference area will be assigned to the study group. The study group members and the facilitator will have access to this area.

So that students have access to other class members, study groups members will not be permanent, but will be changed at least twice or more during a semester.

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Interactive Learning

A goal of TLM is to develop the skill of students in their increasing ability to work effectively as a member of a team and to contribute to the team’s ability to identify and solve problems.

Asynchronous student-centered interactive learning focuses on students sharing information that is pertinent to the content area. They build a knowledge base as they review projects, write for discussion groups, and participate in group activities. It is dynamic and productive aspect of the TLM.

To this end, curriculum will be instructionally designed so that students work in a combination of group and individual activities. Strong components will be designed for student to student, and students to facilitator interaction.
A high level of student participation will be valued. To increase student participation, faculty may assign a grade for interaction which can range from ten to forty percent of the grade depending on the class content. The curriculum provides and encourages a high level of student participation to increase the student's ability to work effectively as part of a problem solving team. Suggestions for the content interaction grade (or relevant ceu) will be made to instructors in the faculty guide for the course.

Asynchronous communications will be included in the distance learning structure of courses. Asynchronous communication in distance learning makes collaboration more intense and incorporates much more interaction than face-to-face groups and maintains the strongest part of the face-to-face teaching/learning model strongly valued by JHU.

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

Collaborative, Problem-solving Methodologies

Collaboration for the purpose of problem-solving can assume a different form and function in distance education. Directed study work is solitary by design. The physical environment can mask some of the communication difficulties inherent in phone and computer links.

Distance education curriculum should reflect the differences in group collaboration and problem solving. Alternative strategies should be identified for this process.

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

Classes will be Convenient for the Specified Audience

The distance education program will provide maximum flexibility for the place and time a course is offered.

Additional flexibility will be provided for the student by the instructor/facilitator when real workplace deadlines and demands, meet the artificial deadlines that are created for the class. It is expected that the student will clear the time to efficiently and successfully complete the class in a timely manner, but when necessary, the student should be given the benefit of flexibility.

If a student shows a pattern of time mismanagement, staff counselors and/or should provide an intervention that will assist in changing the behavior.
Refinements for specific audiences:

- Graduate: no additional requirement
- Professional Development: no additional requirement
- ELC: no additional requirement

**Anytime Anyplace and Anywhere**

It is anticipated that the majority of the coursework will be conducted asynchronously. This gives students and faculty control over their participation and provides a great deal of flexibility for them.

Facilitators will account for about ten to fifteen percent of the written communication, with students carrying the responsibility for the discussions in the class.

No one person should dominate in this setting. Students who do not understand the facilitators' role adequately tend to want to be “leaders” for the group in what they consider the “absence” of the instructor.

Participation should be distributed equally and equitably among the students so that each student has access.

Many students prefer the asynchronous nature of distance learning as it provides them with the time to reflect on materials and not be put on the spot to answer questions on the fly. The time to reflect provides a better response and enriches the depth of information shared in the class by students.

Refinements for specific audiences:

- Graduate: no additional requirement
- Professional Development: no additional requirement
- ELC: no additional requirement

**Course Length**

For three hour college credit course based on the Carnegie unit of 15 hours of class time for one college credit, the course length will be half of one semester or eight weeks. The course will begin with the regular semester and end in eight weeks. Courses beginning at the mid-point of the regular semester will conclude in eight weeks at the end of the regular semester.

For summer school, courses will last half of the regular summer school course or no less than four weeks.

Courses offered during vacation periods will be set to last for the duration of the vacation period. Intense courses may be offered during intersessions and the winter holiday.

Appropriate course length will be set by other groups depending upon the content as required by the Maryland State Department of Education.
Refinements for specific audiences:

Graduate:  no additional requirement
Professional Development:  no additional requirement
ELC:  no additional requirement

Sequenced Courses

Some courses may be structured in sequences so that the student requires the content of the first course in order to take a second course in the sequence. Courses of this nature will be offered frequently and in sequence.

Refinements for specific audiences:

Graduate:  no additional requirement
Professional Development:  no additional requirement
ELC:  no additional requirement

Courses

Distance education is considered to be mainstream. Courses will not be positioned as alternative methods of providing courses.

Courses will be designed as modules. Whenever possible, full courses will not be constructed in a linear fashion.

Mixed media will be used in all course areas.

Learning objectives and outcomes will be clearly specified and measurable.

Refinements for specific audiences:

Graduate:  no additional requirement
Professional Development:  no additional requirement
ELC:  no additional requirement

Course Materials

Whenever possible, course materials will be provided electronically. These include books, articles, research, CD-ROMs, Internet Web pages, graphics, simulations and other interactive materials that will meet the learning needs of a variety of learners and enhance the instructional flexibility of the course for all learners.

As many courses will be moved from the traditional classroom, materials should be reviewed by the instructional design team for adequacy in meeting the needs of the
mediated course. More effective teaching aids will need to be designed. No one member of the instructional design team, including the instructor, will make a final decision about the adequacy of materials to clarify and enhance course content.

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**Assignments**

Assignments will be spread over the period of the course and modularized where possible so that students are working on assignments throughout the course.

Assignments should be rigorous, challenging, and interesting.

Assignments should be instructionally designed so that all learning styles and multiple intelligences are met throughout the course.

Assignments should be instructionally designed so that all of the learning environment software features are used evenly. For example, a course would not concentrate only on written paper assignments, or only discussions.

Assignment dates must be realistic for working adults with fulltime positions and family responsibilities.

Assignments will include video, chats, and use other technologies as they become available and are components of the technology requirements.

Student research projects will be assigned that are collaborative wherever possible and workplace related wherever possible.

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Student Learning Assessment

Authentic assessment will be used as the preferred mode to ensure competency.

Where pencil and paper evaluation is deemed necessary, it will not use multiple choice or true/false questions. Students will be asked to identify problems, problem solve and apply content to show competency and mastery.

Refinements for specific audiences:

- Graduate: no additional requirement
- Professional Development: no additional requirement
- ELC: no additional requirement

Learning Outcomes Specified in the Curriculum

Curriculum specifications will include measurable and clearly articulated learning outcomes that arise from curriculum designed for the distance education delivery system. The delivery system does impact the type of learning outcomes appropriate for a course. It is recognized that technology will enable new learning outcomes to exist that may not exist within the traditional classroom environments.

Identification of common learning outcomes are appropriate across delivery systems; but also distinguish those which are unique to specific media, and make the adjustments required to ensure instructional quality.

Refinements for specific audiences:

- Graduate: no additional requirement
- Professional Development: no additional requirement
- ELC: no additional requirement

Students Must Possess Basic Skills and Subject Matter Knowledge or Complete Remediation Courses

Evaluation of basic skills is frequently more difficult in teaching at a distance, particularly when proctors must be arranged. The process requires more time and effort on the part of students and staff. In addition, there may be more skill requirements (or different ones) for these students. For example, distance education students must be more self-reliant as well as self-directed than classroom students; they may need to possess more prolific writing skills; they need to have knowledge of computers and keyboarding skills; and, they might have to learn with direct involvement by the facilitator to make physical demonstrations.

Adoption of basic skill evaluation procedures work well with the media, for students who need remediation. A systematic process for referring students in need of remediation will be developed.
Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

**Theory and Practice is Integrated in the Curriculum**

The successful integration of theory and practice into the technology mediated learning experience is a critical component of the TLM. Distance education offers opportunities that cannot be seen when it is conceptualized as a classroom derivative.

The dynamics of the distance education learning environment can promote and reinforce the theoretical understanding of course material in a way that enhances conceptual learning, even over the traditional classroom setting. Teaching and learning is more complicated when there is an inability to "show" or demonstrate certain procedures.

Successful integration and practice requires faculty participation in the development of curriculum for multi-media delivery as well as faculty training in integrative processes, specific media of instruction.

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

**Rubrics**

Rubrics provide an even-handed and proactive way to help faculty and students evaluate their own skills and skill sets.

Rubrics will be designed to define levels of skill in the use of technology and in class facilitation for instructors. ISTE is developing new standards which may be appropriate as a basis for instructors.

Rubrics will be designed to define levels of skill in the use of technology and in working in the distance learning environment for students. Some rubrics exist and may be appropriate as a basis for students.

Rubrics are also useful in content development to determine what students will know at certain levels of their development and how they will provide evidence of that. Each course will be designed with a set of rubrics to provide this for students so that they know what is expected of them, and for instructors to better help them evaluate students.

This should appear in the handbook (paper and online).
Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

**Handbook**

A Handbook will be created to support faculty and students. It will be available as a printed and on-line document.

The Handbook will include the following types information:
- Philosophy and mission
- Types of courses
- Administration/administrators
- Legal
- Rubrics
- Reference/resources/libraries
- Contacts
- Technology overview
- Teaching in a Facilitated Environment
- Learning How to Learn
- Learning in a Facilitated Environment
- Collaborating in a Mediated Environment
- Review of English for use online

(Other items will be added)

Team 6, (administrators/writers) will write and prepare the handbook for review by the other teams and their input to meet audience needs.

Refinements for specific audiences:

Graduate: no additional requirement
Professional Development: no additional requirement
ELC: no additional requirement

**Remaining Intellectually Open and Introspective**

Distance learning technology provides an ideal environment in which to pursue academic achievement, promote scholarly collaboration, and provide global access to educational opportunities.

Exploiting the opportunities technology provides can best be done by approaching these delivery systems as separate learning domains with unique strengths and weaknesses; rather than attempting to replicate every successful nuance of the classroom programs.

This will require openness, introspection, and healthy skepticism to assimilate these programs on a daily operational basis, into the current offerings.
Refinements for specific audiences:

<table>
<thead>
<tr>
<th>Audience</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>no additional requirement</td>
</tr>
<tr>
<td>Professional Dev.</td>
<td>no additional requirement</td>
</tr>
<tr>
<td>ELC</td>
<td>no additional requirement</td>
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</tbody>
</table>
## Teaching-Learning Model for Distance Education

<table>
<thead>
<tr>
<th>Audience</th>
<th>Graduate</th>
<th>Professional Development</th>
<th>Electronic Learning Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Service K-12 teachers</td>
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<tr>
<td>Graduate Courses for Credit</td>
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<tr>
<td>Instructors</td>
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<tr>
<td>User Group/End User Training</td>
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<tr>
<td>Classes are offered asynchronously with some interaction through synchronous communications. Students who cannot attend synchronous portions are not affected detrimentally but are provided with recordings of events. Classes are offered to be anywhere, anytime, or anyplace and for the convenience of students during weekends, holidays and other times when work and family commitments may be less.</td>
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<tr>
<td><strong>Academic Model</strong></td>
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<tr>
<td>Facilitation gained through professional development for faculty, learning how to learn course for students, mentoring for faculty, enforcement by administration and ongoing professional development</td>
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<tr>
<td><strong>Courses</strong></td>
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<tr>
<td>Courses will be modular and developed to work with the IMS System which Blackboard supports.</td>
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<tr>
<td>Centralized with teams of instructors and media development experts</td>
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<tr>
<td>Team of instructors jointly develop the course, sharing their ideas, documents, textbook, etc. to develop the best course with the media specialists</td>
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<tr>
<td>The total development team has the approval over the course.</td>
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<tr>
<td>Courses (continued)</td>
<td>Graduate</td>
<td>Professional Development</td>
<td>Electronic Learning Communities</td>
</tr>
<tr>
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</tr>
<tr>
<td>Half of the semester or eight weeks. Students would take one course at a time because of the intensity. Non-credit course length is set according to the content. Weekend and intersessions, and holidays will be included in course days. Positions distance education as necessary and not alternative. Successfull integration of technology and academic ideals of andrology (college level) and constructivism (K-12 level) Course materials are electronic – Internet, Blackboard, CD-ROM, DVD. Work with textbook electronic publishers</td>
<td></td>
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<tr>
<td><strong>Student-Faculty Ratio</strong></td>
<td>Range of 24-30 students assigned to one facilitator Discussions 4-6 students Projects 3-5 students</td>
<td></td>
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</tr>
<tr>
<td><strong>Faculty</strong></td>
<td>Instructors receive major support in developing new skill sets to teach online and over video conferencing or TV. They will also observe classes, will be mentor by experts in distance education, and a professor experienced in distance education will approve their continued work in the program. Instructors will be facilitators of learning Multiple technologies will be used including IMS, Video, Audio, text,, CD-ROM, DVD, simulations, virtual reality, and assistive technologies. Other technologies will be used as they are developed and become stable Courses will be developed to include assessment through portfolios, rubrics, standards, and other ideas that provide ways to assess the true growth of all students and their LS?MI. Instructors will actively participate in the academic senate</td>
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</table>

*Teaching Learning Model*

*The Education Coalition 3/12/2000*
<table>
<thead>
<tr>
<th>Faculty (continued)</th>
<th>Graduate</th>
<th>Professional Development</th>
<th>Electronic Learning Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty will hold advanced/earned degrees</td>
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<tr>
<td>Faculty will interact at an expected level which will be measurable, during a set number of days per week depending on the course; will hold office hours; will be available by telephone; will respond with answers to questions within 24 hours.</td>
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<tr>
<td><strong>Students</strong></td>
<td></td>
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</tr>
<tr>
<td>Extensive orientation to school, software, distance learning, learning how to learn, LS/MI, collaboration, interaction, working in study groups, and facilitation methods from the student position, self direction and becoming independent in learning. Basic skill assessment and remediation will be ongoing as necessary for student growth.</td>
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<tr>
<td>Authentic assessment, hands-on, work related.</td>
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<tr>
<td>Rubrics will be used to design courses and define skill levels and what demonstrates that skill level. Rubrics will be available to faculty and students. Faculty developing the course will participate in their development</td>
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<tr>
<td>Learning cohorts are maintained where possible</td>
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<tr>
<td>Study groups are a normal feature of the class which is monitored by the instructor (but not led). Study groups are used to substantially increase collaboration skills, negotiation skills, and identify problem solutions for assignments.</td>
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</tr>
<tr>
<td>Technology Requirements</td>
<td>Graduate</td>
<td>Professional Development</td>
<td>Electronic Learning Communities</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
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<td>---------------------------------</td>
</tr>
<tr>
<td>Full support services are available to students online. Substantial technology support is available between midnight and 7 AM. Specific expectations are set for instructors and other support staff.</td>
<td>Cell/beeper for access by students after hours</td>
<td>Cell/beeper for access by students after hours</td>
<td></td>
</tr>
<tr>
<td>Asynchronous and Synchronous. Study group may be synchronous. Audio and video conferencing may be used for real-time work. Recordings will be made for students who cannot attend due to work or other problems.</td>
<td></td>
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</tbody>
</table>
## Comparison of the Distance Education Teaching-Learning Model to Other Educational Models

<table>
<thead>
<tr>
<th>Audience</th>
<th>Common Programs in Distance Education</th>
<th>JHU-Center for Technology in Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>All audiences</td>
<td>All audiences</td>
<td>In Service K-12 teachers Graduate Courses for Credit Instructors User Group/End User Training</td>
</tr>
</tbody>
</table>

| Classes are offered at the convenience of the institution and classroom availability | Classes are offered asynchronously | Classes are offered asynchronously with some interaction through synchronous communications. Students who cannot attend synchronous portions are not affected detrimentally but are provided with recordings of events. Classes are offered to be anywhere, anytime, or anyplace and for the convenience of students during weekends, holidays and other times when work and family commitments may be less. |

<table>
<thead>
<tr>
<th>Academic Model</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Usually traditional - Lecture</td>
<td>Tries for facilitation but lack of faculty development prevents significant movement</td>
<td>Facilitation gained through professional development for faculty, learning how to learn course for students, mentoring for faculty, enforcement by administration and ongoing professional development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Courses are not modular</td>
<td>Courses are not module</td>
<td>Courses will be modular and developed to work with the IMS System which Blackboard supports.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State Frameworks and Districts Professor written</th>
<th>Professor written and driven</th>
<th>Centralized with teams of instructors and media development experts</th>
</tr>
</thead>
<tbody>
<tr>
<td>One instructor develops course based on materials he/she wrote</td>
<td>One instructor develops course based on materials he/she wrote</td>
<td>Team of instructors jointly develop the course, sharing their ideas, documents, textbook, etc. to develop the best course with the media specialists</td>
</tr>
</tbody>
</table>

<p>| Instructor has final approval of course | Instructor has final approval of course | The total development team has the approval over the course. |
| Standard semester according to the institution | Standard semester, half semester, or based upon the distance education program which may be one to six weeks. | Half of the semester or eight weeks. Students would take one course at a time because of the intensity. Non-credit course length is set according to the content. Weekend and intersessions, and holidays will be included in course days. |
| Sees distance education as alternative | Positions distance education as alternative | Positions distance education as necessary and not alternative. Successful integration of technology and academic ideals of androgogy (college level) and constructivism (K-12 level) |
| Course materials are paper and textbook based. | Course materials are text based and textbook based. Few materials are available electronically | Course materials are electronic – Internet, Blackboard, CD-ROM, DVD. Work with textbook electronic publishers |
| <strong>Student-Faculty Ratio</strong> | <strong>Faculty</strong> |
| Ranges from 30 to auditorium size | Instructor receives no support or professional development in teaching | Instructor receives some support in professional development for teaching, but it is seldom enough to develop a skill set that approaches a level of excellence during the first year. |
| Range from 8 to any number | Instructor receives major support in developing new skill sets to teach online and over video conferencing or TV. They will also observe classes, will be mentor by experts in distance education, and a professor experienced in distance education will approve their continued work in the program. |
| Range of 24-30 students assigned to one facilitator Discussions 4-6 students Projects 3-5 students | Instructors do not facilitate learning | Instructors may facilitate learning |
| | Instructors will be facilitators of learning | |
| Few technologies are used or integrated into the curriculum or classroom | One technology is generally used to deliver the course | Multiple technologies will be used including IMS, Video, Audio, text, CD-ROM, DVD, simulations, virtual reality, and assistive technologies. Other technologies will be used as they are developed and become stable |
| | Faculty seldom use authentic assessment, portfolios, rubrics or other new methods to measure student growth. | Courses will be developed to include assessment through portfolios, rubrics, standards, and other ideas that provide ways to assess the true growth of all students and their LS?MI. |
| Faculty are members of the Academic Senate | Instructors are seldom academic senate members unless they were already a member | Instructors will actively participate in the academic senate |
| Faculty hold advanced degrees | Faculty hold advanced degrees, but may not be regular faculty. | Faculty will hold advanced/earned degrees |</p>
<table>
<thead>
<tr>
<th>Faculty meet with students after class and during limited office hours on campus</th>
<th>Faculty interact more extensively with students online, may hold audio conferences or office hours.</th>
<th>Faculty will interact at an expected level which will be measurable, during a set number of days per week depending on the course; will hold office hours; will be available by telephone; will respond with answers to questions within 24 hours.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Students sometimes receive school orientation</td>
<td>Orientation to software, some remediation</td>
</tr>
<tr>
<td>Traditional assessment and/or testing</td>
<td>Traditional assessment and/or testing where possible. Primarily essays. Some tests are proctored in regional areas.</td>
<td>Authentic assessment, hands-on, work related.</td>
</tr>
<tr>
<td>Rubrics are not used</td>
<td>Rubrics are not used</td>
<td>Rubrics will be used to design courses and define skill levels and what demonstrates that skill level. Rubrics will be available to faculty and students. Faculty developing the course will participate in their development.</td>
</tr>
<tr>
<td>Students do not go through classes together</td>
<td>Some students go through classes together</td>
<td>Learning cohorts are maintained where possible</td>
</tr>
<tr>
<td>Individual study</td>
<td>Assignments to groups</td>
<td>Study groups are a normal feature of the class which is monitored by the instructor (but not led). Study groups are used to substantially increase collaboration skills, negotiation skills, and identify problem solutions for assignments.</td>
</tr>
<tr>
<td>Student Support: Traditional campus services are available to students</td>
<td>Traditional campus services are available, but many more are available online. Technical support is available 24 hours a day, but is limited between midnight and 7 AM.</td>
<td>Full support services are available to students online. Substantial technology support is available between midnight and 7 AM. Specific expectations are set for instructors and other support staff.</td>
</tr>
<tr>
<td>Synchronous – real-time classes</td>
<td>Asynchronous – classes do not meet at the same time</td>
<td>Asynchronous and Synchronous. Study group may be synchronous. Audio and video conferencing may be used for real-time work. Recordings will be made for students who cannot attend due to work or other problems.</td>
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<tr>
<td>--------------------------------</td>
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</tr>
<tr>
<td>Limited interaction and collaboration due to Lecture methods</td>
<td>Extensive interaction but seldom purposeful to advance learning. Some collaboration</td>
<td>Extensively interactive, collaborative and used to solve problems and advance learning. Interaction grades up to 40% may be given by instructors in content appropriate classes.</td>
</tr>
<tr>
<td>Assignments are due in large papers usually, the term paper at the end of the semester</td>
<td>Smaller assignments are made, but many are still paper-based.</td>
<td>Small assignments that are rigorous, exciting and challenging, are used for frequent feedback and sense of accomplishment.</td>
</tr>
<tr>
<td>Learning outcomes are specified but assessment is teacher directed</td>
<td>Learning outcomes are specified but assessment is teacher directed</td>
<td>Learning outcomes are specified when the curriculum is created and assessments created to assess the outcomes (note that faculty developers have participated in this)</td>
</tr>
</tbody>
</table>

**Technology Requirements**

| No technology requirements. Technology is not integrated into the classroom | Learning environment software is required or Internet access | Blackboard is the only supported learning environment. Significant technology requirements, learning environment software, Internet access, extensive use of technological abilities and being close to the edge in use of new methods and technologies. The process promotes extreme comfort with technology and technology integration. |
| No personal technology skills are required | No personal technology skills are required except software use. | Basic and advanced skill set competencies are set for faculty and students and may be increased. |
| Legal issues, confidentiality and other such issues are clearly defined | Legal issues, confidentiality and other such issues are clearly defined | Legal issues, confidentiality and other such issues are clearly defined. A student identification process will be in place. |
| Legal issues are seldom covered with students | Legal issues are seldom covered with students | Legal issues and ethical issues will be discussed with students so that there is a clear set of expectations about appropriate and inappropriate behavior. |