Curriculum Development, Revision, and Evaluation Processes

Mater Virtual Academy uses curriculum developed by Florida Virtual School (FLVS). FLVS has substantial resources for curriculum development and instructional support. The company's team of talented, experienced curriculum specialists, curriculum project managers, content and copy editors, and multimedia designers work to ensure FLVS students are presented content, instructional resources, and activities that prepare them to be active, knowledgeable participants in a global networked society. These individuals apply their deep expertise in online instruction and academic disciplines to the development of curriculum that supports 21st century readiness for every student. Using the Framework for 21st Century Learning[1] process, they work to integrate supportive technologies, inquiry- and problem-based instructional approaches, and higher order thinking skills into all curriculum development efforts.

FLVS aligns its curriculum to the Common Core State Standards as well as individual state standards, and also reviews and aligns with national standards such as National Council of Teacher of Mathematics (NCTM), National Science Teachers Association (NSTA), National Council for the Social Studies (NCSS), and National Education Technology Standards wherever possible. Finally, FLVS curriculum development is guided by iNACOL standards for quality online courses.

Curriculum development is guided by these key principles and tenets:

- Curriculum fosters breadth and depth of understanding in subject area.
- Content is aligned to national and state standards.
- Curriculum is supported by quality, reputable, recently published textbooks and/or proven instructional resources and materials.
- Content and assessments are aligned, accurate, and unbiased.
- Content is current, relevant, and provides real-world applications.
- Content is appropriate for the learner (age, ability, background, reading level, learning style, etc.).
- Instructional design is adaptable and flexible in order to best meet individual needs of Learning Coaches and students.
- Instructional design provides students opportunities to improve learning skills using technological tools (e.g., virtual labs, interactive tools, tutorials, business software, online calculator).
- Navigation is intuitive and age-appropriate.
- Lesson structure is consistent and supports learning sequence of motivation, instructional content, application activities, review of key concepts and assessment.

[1] Partnership for 21st Century Skills' Framework for 21st Century Learning: **WASHINGTON, DC 20001: 2011**

- Scope of course is appropriate with regard to amount of content, length of course and lessons, and course requirements.
- Lesson introduction effectively presents lesson objectives, assesses prior knowledge, sets expectations, and motivates.
- Background information prepares students to access new content, skills, and strategies.
- Curriculum includes opportunities for developing problem-solving and critical thinking skills and real-world applications.
- Curriculum includes opportunities for collaboration and independent study.
- Curriculum includes opportunities to develop oral and written communication skills.
- Curriculum incorporates timely and appropriate feedback to students.

Central to the FLVS curriculum design process is the systematic analysis of curriculum offerings. The analysis phase consists of formative, summative, qualitative, and quantitative measures to determine the value and effectiveness of the curriculum offerings. This multi-level evaluation system incorporates regular reviews of student performance, user feedback, assessment performance analysis, and district, state, and national content standards and assessments. FLVS curriculum development also emphasizes innovation, effective implementation, evaluation of student learning, and continuous improvement, and the company strives to regularly provide new curriculum options that leverage the interactivity and engagement potential of online resources. FLVS always seeks to balance enhancements and additional options with the recognition that students have a wide range of learning styles and needs.

Decisions about improvements and updates to curriculum are also guided by feedback from a variety of critical stakeholders: teachers and administrators, students and parents, school boards, and outside evaluators such as accrediting organizations and sponsors. Comments and input from board members and the results of third-party evaluations also often factor into changes to curriculum.

FLVS understands that clear processes and guidelines that ensure internal consistency, instructional effectiveness and the appropriate use of intellectual property are essential to the development of quality online courses. Therefore, central to the curriculum development process is a research- based development framework designed to support not only quality course development but a feedback loop that ensures continuous improvement. This systematic instructional design process incorporating the elements of analysis, design, development, implementation, and evaluation often referred to as ADDIE:

1. **Analysis:** Prior to course development, a thorough analysis of state graduation requirements, school or board requests, and competitive positioning is completed. Feedback on current courses from student academic performance, user feedback, usability reviews, and national and state standards alignments are incorporated into the analysis.
2. **Design:** Within the design phase, the curriculum team attends to the set of standards around which the course is written, instructional strategies, content, and visual and technical design of the course. Attention is focused on the course's purpose and audience, as well as the course's organization, instructional approach, and instructional resources. Consideration is also given to the role of technology, the level of student engagement, and student learning styles.
3. **Development:** Beginning with a course map which focuses on standards alignment and the identification of the enduring knowledge present in the course, the development lifecycle

incorporates unit-by-unit course development and revision, content analysis and review, editorial review and revision, and a detailed quality assurance appraisal. Procedures for ensuring internal consistency, bias-free content and assessments, instructional effectiveness, and the appropriate use of intellectual property are implemented throughout the development phase.

4. **Implementation:** Each school year brings the implementation of newly developed courses. Before full release, demo courses are created, evaluated by teachers, and suggestions are implemented. When courses are completed, they are presented to students, teachers and effective implementation is supported by updated and ongoing training for all.
5. **Evaluation:** The intent of the evaluation phase is to determine the level of student success, and the impact of the course design on student performance. Evaluation occurs throughout the delivery of the course and includes student performance, internal lesson and assessment analysis, and feedback from students, Learning Coaches, and teachers.

The six-year Course Development and Revision Model includes a continuous evaluation and analysis of data which results in complete course replacements every six years. During this six-year course cycle, daily, yearly, and mid-way revisions are included. In an effort to assess course effectiveness frequently and in multiple ways, and to use these findings as basis for improvement, FLVS continues to implement a multi-level evaluation system that incorporates regular reviews of student performance results, user feedback, assessment performance analysis, and national, state, and district content standards and course requirements.

Course writers and content editors receive online training on instructional sequence, effective online learning strategies, assessment accuracy, development and revision, and the processes illustrated above. During the development phase, content editors use a content editing checklist to provide feedback and direction to writers. This checklist is designed to ensure that all lesson and assessment content and visuals are unbiased and represent cultural and global diversity.

All feedback and subsequent course revisions are vetted by in-house content editing specialists and curriculum development specialists and managers. Curriculum specialists may confer with assessment specialists on the Research and Assessment Team for feedback on assessment reliability, validity, and absence of bias.

Course development follows a Backward Design Model. This begins with the standards alignment and the identification of the "big ideas" or enduring knowledge present in the standards. Identification and development of assessment frameworks follow to ensure that key concepts are measured in appropriate, un-biased, and varied ways. Moving "backwards" from the assessments is the development of instructional components (i.e., units, lessons, activities, and multimedia) that will ultimately lead the students to demonstrate their learning. A graphic of this model is represented below.

Each course that is developed has a consistent design, structure, instructional sequence, and variety of assessments that measure student learning. Resources, which include texts and vetted assessment items from leading publishers, are chosen to align to standards and to provide students with a variety of learning experiences. Online interactive media and instructional tools may be developed to support key concepts and provide students with multiple opportunities to practice their learning. Additionally, third party resources and simulations may be included in course content to provide students with a variety of ways to access key concepts.

Curriculum and course evaluation follows the iNACOL - Course Evaluation and Management standard: "Course provider uses multiple ways of assessing course effectiveness." The following performance indicators are used to evaluate course effectiveness. Based on multiple data points, curriculum is revised, enhanced, or replicated to impact student performance.

- Student Performance Results – Formative and Summative
  - LEAP (Longitudinal Evaluation of Academic Progress) proprietary pre and post assessments
  - Course Assessments
  - Exit Exams/State testing
  - AP Results

- Course/Lesson Performance
  - User Feedback – Students, Teachers, Learning Coaches

    (Issue Aware tickets, Feedback from Teacher Course Liaisons)

- Assessment Analysis Reports

- Course Review
  - Standards Alignments
  - Graduation Requirements
  - State and District Requirements

Accessibility for Students with Disabilities

MVA has extensive experience in meeting the needs of students with disabilities in a virtual school environment.

FLVS courses comply with the National Instructional Materials Accessibility Standard (NIMAS). As of August 2006, federal law requires publishers of K-12 curriculum to provide a digital version of textbooks and other related materials. The Individuals with Disabilities Education Act (IDEA 2004) established the format of these digital versions as the NIMAS. The NIMAS applies to printed textbooks and related printed core materials that are written and published primarily for use in elementary and secondary schools and are required by FLVS for use by students.

FLVS coordinates with the National Instructional Materials Access Center (NIMAC) to ensure access to eligible students with disabilities. All contracts with publishers of textbooks and related printed core material include a requirement for NIMAS compliance. FLVS takes appropriate steps to ensure that only NIMAS eligible students receive these specialized formats. Students eligible to receive specialized formats produced by NIMAS files include students who are (a) blind (a visual acuity of 20/200 or less in the better eye after correction or fields less than 20 degrees), (b) visually impaired (a visual impairment with corrections and regardless of optical measurement that prevents the student from reading standard print), (c) physically disabled (a physical limitation that prevents the student from reading standard print), and (d) print disabled (having a reading disability resulting from an organic brain dysfunction and of sufficient severity that it prevents the student from reading printed materials).

Specialized formats are not provided to students who are not NIMAS eligible, even though they may benefit. The Individualized Education Program (IEP) team determines the instructional program, modifications, and accommodations needed for students with disabilities, including the need for accessible instructional materials. MVA will assume responsibility for providing accessible formats to students who are not eligible, such as students with disabilities other than those specified and students with Section 504 plans who do not qualify for NIMAS-produced materials.

Strategies for Addressing Multi-Lingual Learners

MVA provides quality language instruction, based on scientific research for English acquisition, in addition to quality academic instruction in reading and math. Children who are becoming fluent in English are also learning academic content in such areas as reading and math. Children receive a planned instructional program of English as a second language instruction (ESL) at their developmental and instructional level to facilitate the acquisition of English language skills. This instruction is usually provided by each school's ELL Lead. MVA provides ELLs with virtual English language acquisition support. Students receive support from a highly-qualified ESL teacher via telephone and Live sessions. Students receive individualized attention that facilitates fluency in English. This targeted instruction and support is designed to assist the student with attaining English proficiency. Students are encouraged to use both English and their native language to understand and learn the English language. Intensity of service depends on the needs of the student.

The academic content areas are taught at the student's grade level. This immersion will engage and challenge the student academically while enhancing English language proficiency. Finally, parents have the right to decline ELL enrollment or to remove their child from the ELL program.

To support multi-lingual learners, teachers select and document ESOL strategies in their daily lesson plans and their Live sessions based on the second language acquisition proficiency level of the students. Teachers document mastery of core curriculum with student work samples. The principal or assistant principal verifies the documentation of the use of ESOL strategies to make instruction comprehensible. For students who are not progressing linguistically and academically, an ELL Committee will address interventions and establish a progress monitoring timeline is developed and implemented immediately in an ELL Committee meeting. This

monitoring process is ongoing throughout the school year.

The individualized pace of the curriculum programs allow students to move more quickly through subjects where language is not a factor and spend more time on reading and writing activities.

Services that promote language acquisition include instructional support to help ELL students attain proficiency in listening, speaking, reading, and writing. ELL services will be provided to guide instructional practice, teacher modification of content lessons and/or assessments, and direct instruction via Live sessions.

The curriculum specialist will play a key role in ensuring integration of students into the school community. The specialist will maintain ELL student files; provide instructional consultation and modification of lessons, assignments, and assessments to Learning Coach(es) of ELL students on a minimum biweekly basis; develop presentations and provide direct instruction to ELL students in reading, writing, listening, and speaking through Live sessions and telephone conference; provide progress monitoring throughout the school year using various progress monitoring tools and curriculum-based measures; create and implement interventions based on student need and data from progress monitoring; monitor exited ELL students for academic progress using state-specific criteria for two years after program exit; and stay current on state legislation pertaining to ELL students.

NCAA

Mater Virtual Academy's courses are approved by the NCAA since MVA uses NCAA approved Florida Virtual School Courses.