



K – 12  
Curriculum Renewal  
Process

2011-2012



## **Introduction**

We believe all students *can* learn, and it is our duty to ensure that all students *do* learn. We accomplish this by developing a comprehensive, integrated approach that provides system-wide support to schools, families, and the community.

The Middleton-Cross Plains Area School District has a history of commitment to excellence in education. The board of education and district citizens have endorsed this commitment by supporting the development, implementation and evaluation of the curriculum and the instructional program. Administrators and staff members have worked together to design and implement instructional programs which will meet the many and diverse needs of students from pre-kindergarten through grade twelve. While there are many reasons to be proud of the district's instructional program, excellence demands a dedication to continuing evaluation and improvement.

This document is a design that provides for constant renewal to meet the changing needs of students and society. The philosophy and goals give direction and stability to the process. The guide provides for curriculum development by district staff and administration, and adoption by the Board of Education. It includes a structure for the implementation of curriculum standards in classrooms, and evaluation through a process of self-study and program review. The guide is intended to provide direction, coordination and structure for district teachers, administrators and leadership teams as they strive for excellence.

## Curriculum Development in a Professional Learning Community

According to studies, teachers increase the effectiveness of their schools when they collectively identify and work toward the results they desire, develop collaborative strategies to achieve their goals, and create systems to assess student learning through a backwards design process. A professional learning community strives to provide its students with a curriculum that has been developed by the faculty through a collaborative backwards design process. Students are much more likely to succeed in school if the teacher teaches to the curriculum developed by consensus, students practice the skills the curriculum emphasizes, and assessment programs are designed to determine the degree to which students demonstrate understanding and transfer of big ideas.

### Validating Alignment and Planning for Continuous Curricular Improvement

Agreement on standards of quality and mastery is essential in promoting excellence and equality of teaching and in validating alignment of curriculum, instruction, and assessment with standards across schools. The following are indicators of a well-designed standards-based curriculum implementation:

- The written curriculum aligns with content and assessments standards.
- The curriculum is designed with clarity about the desired learnings, and based on evidence of real learning for understanding and transfer.
- The curriculum is rigorous, balanced, and aligned with a sharper focus on learning *priorities*: the focus is on *big ideas*, *core tasks* of transfer to frame curricula.
- Classroom assessments are central to the curriculum design, not an after thought, and check for understanding and transfer
- Data are used to improve teaching and learning.
- District policies and resources support the implementation of standards.

### Principles of the MCPASD Curriculum Development Process

1. Teacher teams will work collaboratively to write curriculum in an *Understanding by Design* (UbD) format with goals that ensure understanding and transfer of knowledge and skills for each content area.
2. The important determination of what students should know and be able to do as a result of their education will be a collective, rather than an individual decision.
3. The curriculum should help teachers, students, and parents clarify the specific knowledge, skills, and understanding that students should be able to transfer as a result of their schooling.
4. The results-oriented curriculum will reduce content and enable all parties to focus on essential and significant learning, understanding, and transfer.

5. The curriculum process will identify common evaluative criteria and assessments that will enable an individual teacher, a teaching team, and the school to monitor student achievement at the classroom level.
6. Curriculum and assessment development will support the continuous improvement process.

### ***Understanding by Design Curriculum Framework in the Middleton-Cross Plains Area School District***

Understanding by Design (UbD) is a framework for improving student achievement. Emphasizing the teacher's critical role as a designer of student learning, UbD works within the standards-driven curriculum to help teachers clarify learning goals, devise revealing assessments of student understanding, and craft effective and engaging learning activities.

Understanding by Design is based on the following key ideas:

- A primary goal of education should be the development and deepening of student understanding.
- Students reveal their understanding most effectively when they are provided with complex, authentic opportunities to explain, interpret, apply, shift perspective, empathize, and self-assess. When applied to complex tasks, these "six facets" provide a conceptual lens through which teachers can better assess student understanding.
- Effective curriculum development reflects a three-stage design process called "backward design" that delays the planning of classroom activities until goals have been clarified and assessments designed. This process helps to avoid the twin problems of "textbook coverage" and "activity-oriented" teaching, in which no clear priorities and purposes are apparent.
- Student and school performance gains are achieved through regular reviews of results (achievement data and student work) followed by targeted adjustments to curriculum and instruction. Teachers become most effective when they seek feedback from students and their peers and use that feedback to adjust approaches to design and teaching.
- Teachers, schools, and districts benefit by "working smarter" through the collaborative design, sharing, and peer review of units of study.

# UbD in a Nutshell

## Stage 1: Desired Results

*What long-term transfer goals are targeted?*

*What meanings should students make?*

*What essential questions will students explore?*

*What knowledge & skill will students acquire?*

## Stage 2: Evidence

*What performances and products will reveal evidence of meaning-making and transfer?*

*What additional evidence will be collected for other Desired Results?*

## Stage 3: Learning Plan

*What activities, experiences, and lessons will lead to achievement of the desired results and success at the assessments?*

*How will the learning plan help students of Acquisition, Meaning Making, and Transfer?*

*How will the unit be sequenced and differentiated to optimize achievement for all learners?*

1. UbD is a way of thinking purposefully about curricular planning and school reform. It offers a 3-stage design process, a set of helpful design tools, and design standards -- not a rigid program or prescriptive recipe.
2. The primary goal of UbD is student understanding: the ability to make meaning of “big ideas” and transfer their learning.
3. UbD “unpacks” and transforms Content Standards into the relevant Stage 1 elements and appropriate assessments in Stage 2.
4. Understanding is revealed when students autonomously transfer their learning through authentic performance. Six facets of understanding - the capacity to *explain*, *interpret*, *apply*, *shift perspective*, *empathize*, and *self assess* - serve as indicators of understanding.
5. Teachers are coaches of understanding, not mere purveyors of content or activity. They design for and support “meaning making” and “transfer” by the learner; and adjust to achieve intended results.
6. Planning is best done “backward” from the desired results and the transfer tasks that embody the goals. The 3 Stages (Desired Results, Evidence, Learning Plan) must align for the unit to be most effective.
7. Regular reviews of curriculum against design standards enhance curricular quality and effectiveness.
8. UbD reflects a “continuous improvement” approach. The results of curriculum designs - student performance - informs needed adjustments.

# UbD in a Nutshell

## Stage 1: Desired Results

### A transfer goal -

- states the long-term accomplishments that students should be able to *do* with knowledge and skill, on their own.
- frames Standards as long-term performance accomplishments.
- answers the questions “Why?” and “What can you do with this?”

*UbD2 = pp. 39 - 43; 78 - 81*

### An essential question -

- is open ended; has no simple “right answer.”
- is meant to be investigated, argued, looked at from different points of view.
- encourages active “meaning making” by the learner about important ideas.
- raises other important questions.
- naturally arises in everyday life, and/or in “doing” the subject.
- constantly and appropriately recurs; it can fruitfully be asked and re-asked over time.

*WKBK = pp. 88 - 106*

*UbD2 = Ch 5, pp. 105 - 125*

### A “meaning” -

- is a student-constructed understanding about a “big idea” (the “moral of the story” of the unit).
- makes sense of otherwise discrete facts - it “connects the dots”
- is transferable to other contexts.
- is usually not obvious, and may be counter-intuitive; therefore prone to misunderstanding.
- cannot be simply transmitted; it must be “earned” by the learner.
- is an inference, stated as a specific generalization: “the student will understand THAT...”

*WKBK = pp. 107 - 118*

*UbD2 = Ch 6, pp. 126 - 145*

### Knowledge & Skill -

- specifies what students should know and be able to do as a result of the unit (usually stated in established Standards and benchmarks)
- reflects both the targeted knowledge and skill and the enabling knowledge and skill implied in the understanding-related goals

*WKBK = pp. 119 - 125*

## STAGE 1

1. A main focus in STAGE 1 is making sure that our learning goals are framed in terms of important accomplishments reflective of understanding
2. The goal of understanding has two connotations: 1) making “meaning” of big ideas, and 2) autonomous “transfer” of learning to new situations.
3. Research conclusively shows that students need to grasp the big ideas if they are to make sense of their lessons, and transfer their learning to new lessons, novel problems, and real-world situations.
4. “Transfer” refers to the ultimate desired accomplishment: what, in the end, should students be able to *do* with all this ‘content’, on their own, if this and other related units are successful?
5. It is important to state the transfer goals explicitly, even if such goals are not explicitly noted in the established standards.
6. We must be mindful of potential student **misunderstandings** and transfer deficits. Establishing clear and explicit goals also means predicting possible trouble spots in learning and performance.
7. Resist listing all the possible knowledge and skill goals that are in any way related to the unit topic. Identify only those goals that you plan to directly assess in STAGE 2 and explicitly address in STAGE 3.

*UbD2 = 2nd ed. of Understanding by Design*

*WKBK = UbD Professional Development Workbook*

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# UbD in a Nutshell

## Stage 2: Assessment Evidence

### Performance Task(s) -

- are needed as evidence of understanding because we have to see if the learners can apply their learning to various issues, problems, situations, and contexts.
- reflect the 6 Facets of understanding: explanation, interpretation, application, perspective, empathy, and self-understanding.
- establish real-world contexts, demands, messiness, audiences, and purposes.
- should be written in the GRASPS format to make assessment tasks more authentic and engaging.
- are evaluated using valid criteria and indicators, reflective of not only quality performance but related to the Desired Results of Stage 1.

*WKBK = pp. 159 - 179; GRASPS pp. 170 - 172*

*UbD2 = pp. 146 - 171*

### Other Evidence -

- identifies needed assessments of Stage 1 goals; includes conventional tests, quizzes, assignments, observations, etc. to round out the assessment.
- can overlap the performance-based evidence, thereby increasing the reliability of the overall assessment (especially if the performance task was done by a group)

*WKBK = pp. 142 - 154*

## STAGE 2

1. The focus in STAGE 2 is “valid evidence” - making sure that what we assess and how we assess follows logically from the STAGE 1 goals.
2. Assessing for understanding requires evidence of the student’s ability to insightfully explain or interpret their learning - to “show their work” and to “justify” or “support” their performance/product with commentary.
3. Assessing for understanding also requires evidence of the student’s ability to apply their learning in new, varied, and realistic situations - transfer - in which they must “do” the subject as opposed to merely answering pat questions.
4. The 6 Facets of Understanding provide a helpful framework for building appropriate assessment tasks:
  - Explain: the student generalizes, makes connections, has a sound theory, can put in their own words
  - Interpret: the student offers a plausible and supported account of text, data, experience
  - Apply: the student can transfer, adapt, adjust, address novel issues & problems
  - Perspective: the student can see from different points of view
  - Empathy: the student can walk in the shoes of people/characters
  - Self-understanding: the student can self-assess, see the limits of their understanding, reflect metacognitively
5. GRASPS is an acronym to help designers construct authentic scenarios for performance tasks:
  - *Goal*: the goal or challenge statement in the scenario
  - *Role*: the role the student plays in the scenario
  - *Audience*: the audience/client that the student must be concerned with in doing the task
  - *Situation*: the particular setting/context and its constraints and opportunities
  - *Performance*: the specific performance or product expected

# UbD in a Nutshell

## Stage 3: Learning Plan

### The learning events -

- should be derived from the goals of Stage 1 and the assessments of Stage 2 to ensure alignment and effectiveness of the activities.
- support student *Acquisition, Meaning Making, and Transfer*.
- are enhanced when the WHERETO elements are included.

### Teaching -

- should reflect the instructional approaches most appropriate to the goals (not what is easiest or most comfortable for the teacher).
- should employ resources most appropriate to the goals (not simply march through a textbook or commercial program).
- be responsive to differences in learners' readiness, interests, and preferred ways of learning.

WKBK = pp.212 - 237; WHERETO pp. 214 - 226  
UbD2 = Chapters 9 & 10; WHERETO pp. 197 - 222

## STAGE 3

1. The focus in STAGE 3 is making sure that *what* we teach and *how* we teach follows logically from and aligns with the STAGE 1 and Stage 2 goals.
2. The learning events are designed to address three interrelated goals: Acquisition, Meaning Making, and Transfer.
3. Teaching for understanding requires that students be given numerous opportunities to draw inferences and make generalizations for themselves (with teacher support). Understandings cannot be simply told; they have to be actively “constructed” by the learner.
4. WHERETO is an acronym for considering and self-assessing the key elements and logic of a learning plan:
  - Where: ensuring that the student sees the big picture, has answers to the “Why?” questions, knows the final performance expectations as soon as possible
  - Hook: immersing the student immediately in the ideas and issues of the unit, engaging the student in thought-provoking experiences/ challenges/questions at the heart of the unit
  - Equip & Experience: providing the student with the tools, resources, skill, and information needed to achieve the desired understandings; and successfully accomplish the performance tasks
  - Rethink: enhance understanding by shifting perspective, considering different theories, challenging prior assumptions, introducing new evidence and ideas, etc. Also: providing the impetus for and opportunity to revise prior work, to polish it
  - Evaluate: ensuring that students get diagnostic and formative feedback, and opportunities to self-assess and self-adjust
  - Tailor: Personalize the learning through differentiated instruction, assignments and assessments without sacrificing validity or rigor
  - Organize: Sequence the work to suit the understanding goals (e.g., questioning the flow provided by the textbook, which is typically organized around discrete topics)

## Monitoring the Curriculum

Monitoring the curriculum involves determining to what extent the approved curriculum has been implemented. Close monitoring of the curriculum does not imply distrust of teachers, nor does it intend to reduce the teacher to a mechanical implementer of what others have produced; instead, this process ensures that students learn skills and gain knowledge in a coherent progression. The district curriculum has been carefully sequenced, articulated, and designed to include monitoring that ensures what students are being taught in 4th grade builds on the content of the 3rd grade curriculum and leads into that of the 5th. Monitoring ensures fidelity of implementation and consistency across the district. Finally, monitoring is useful in helping the principal become more visible and involved with curriculum, one of the central components of continuous improvement.

1. ***The intent is to emphasize mutual accomplishment.*** Mutual accomplishment is a type of implementation in which the developers of an innovation (the district curriculum renewal teams) accomplish their central goal of changing the curriculum while the users of the innovation (teachers) accomplish their goals of influencing the curriculum and maintaining control of the essential elements of classroom life.
2. ***Establish a culture that values continuous improvement.*** The principal will facilitate a continuous improvement process and encourage it as part of the school's values. The emphasis is on improving student learning. Curriculum development and renewal is an ongoing process, not a single event.
3. ***Collaboration is the other critical element in a school's culture.*** The role of the continuous improvement team is to establish the importance of working together in a cooperative manner, create conditions that support collaboration, model it, and celebrate successes.
4. ***Ensure that resources are available in a timely manner.*** New texts and other materials will be ordered early enough to ensure that they will be available for teachers.
5. ***Provide ongoing professional development that is sensitive to teachers' needs.*** Professional development will be intentional, relevant, and aligned to school and district goals and initiatives.
6. ***Assist teaching teams in creating long-term instructional plans.*** Long-term planning calendars and units of study enable the teachers to develop planning documents that they can use as they plan for instruction. Once teaching teams have developed long term and unit plans, the team and the principal can confer in a collaborative climate. Teaching teams and the principal can then begin asking the following questions:
  - Have all the essential learning outcomes (ELOs) been suitably emphasized?
  - Do time allocations reflect curricular priorities?
  - Is the sequence one that will likely lead to mastery?
7. ***Cheer for the new curriculum!***
8. ***Analyze student assessment results.*** The continuous improvement team and teaching teams should examine school-wide and classroom-specific results from an analytical perspective. Such a perspective systematically examines the following issues.

- Was the assessment congruent with the curriculum?
- Were the texts and other instructional materials congruent with the curriculum?
- Was sufficient time devoted to the content included in the assessment?
- Were students motivated to master the curriculum and perform well on the assessments?
- Were effective instructional approaches used?
- Was the curriculum itself of high quality?
- Which groups of students performed below expectations? Do they need additional time, more varied materials, or diversified teaching and learning activities?

Curriculum monitoring is a problem solving process that supports continuous improvement and collaboration and ensures district curriculum coordination while honoring teacher expertise.

Sources: Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement, DuFour and Eaker, 1998  
The Right to Learn, Linda Darling-Hammond, Jossey-Bass, 1997  
Planning and Organizing for Curriculum Renewal, ASCD, 2001

MIDDLETON-CROSS PLAINS AREA SCHOOL DISTRICT  
Essential Questions

	Our actions	Driving beliefs / philosophies
What do we want students to know and be able to do? (Stage 1)	Know and understand state and national standards, assessment criteria, and research-based best instructional practices.	<ul style="list-style-type: none"> <li>• All students have the capacity to learn and will have access to rigorous curriculum.</li> <li>• Teachers working collaboratively are better able to identify and articulate essential learner outcomes than teachers working independently.</li> <li>• District classroom teachers know best what students need based on a solid understanding of the essential learner outcomes and the needs of their students.</li> <li>• All students in a class have the right to learn what has been identified as the most essential content and skills in that curriculum regardless of the teacher assigned to the class.</li> <li>• Less is more (too much content – too little time).</li> <li>• We must be explicit about the knowledge, skills and dispositions we want students to gain and we must teach these.</li> </ul>
	Identify essential learner outcomes (ELOs) for each course/grade level.	
	Align our curriculum and instruction to the ELOs to assure that students are learning what is most essential.	
	Unpack the ELOs to determine the knowledge, skills, and dispositions that are required for students to successfully master each ELO.	
How will we know if they know it or can do it? (Stage 2)	Create quality assessments that truly measure if students have learned the essential learner outcomes.	<ul style="list-style-type: none"> <li>• Assessment must be seen as a tool to measure and promote learning, rather than a method of sorting students.</li> <li>• Formative assessments allow teachers to target their instruction in the most effective manner, focusing on the needs of the students.</li> <li>• Common assessments allow teachers to learn from each other.</li> <li>• Ultimately, we must teach students to accurately assess their own work so that they can set appropriate goals and action plans for self-improvement.</li> </ul>
	Utilize common formative (on-going) assessments to identify students' strengths and weaknesses, to measure student progress, and to adjust your instruction to ensure student learning.	

MIDDLETON-CROSS PLAINS AREA SCHOOL DISTRICT  
Essential Questions

	Our actions	Driving beliefs / philosophies
<p style="writing-mode: vertical-rl; transform: rotate(180deg); text-align: center;">           What will we do when they don't learn it or already know it? (Stages 2 and 3)         </p>	<p>Use results of <i>universal</i> formative assessments to drive instruction.</p>	<ul style="list-style-type: none"> <li>• All students have the capacity to learn.</li> <li>• Educators will differentiate instruction to meet the needs of all students.</li> <li>• No educator can effectively respond to all students without support</li> <li>• Educators will work in collaboration to meet the needs of all students.</li> <li>• In order to be effective, responses to struggling students must be timely and proactive, not after it is too late to make a difference.</li> </ul>
	<p>Provide <i>universal</i>, in class, "just in time" interventions to students when they demonstrate a need.</p>	
	<p>Provide <i>selected</i> classroom supports and interventions to students who are struggling and additional learning opportunities to students who have already mastered the ELO.</p>	
	<p>Provide <i>intensive</i> supports and interventions beyond the classroom for students who need more or who struggle in multiple areas.</p>	

# Developing Essential Learner Outcomes

## Why?

Research shows that teachers are most effective in helping all students learn when they are clear regarding exactly what their students must know and be able to do as a result of the course, grade level, or unit of instruction (Marzano, 2003).

The instructional program framework used in the Middleton-Cross Plains Area School District is built around district academic standards, which are aligned to the Wisconsin Model Academic Standards and CRT Framework. **However, there are far more standards listed than what can realistically be taught effectively within a given school year.** In addition, all standards are considered equal when, in fact, certain standards are more important than others in terms of overall student success. There can be uncertainty and inconsistency regarding which standards need to be emphasized over others.

## Essential Learner Outcomes (ELOs):

- Are the **“core ideas”** of the curriculum that are absolutely essential for all students to learn to have success at the next grade level or course.
- Will help identify content in the curriculum that can be **eliminated as non-essential** so that adequate time can be made for what is most important.

## Essential Learner Outcomes (ELOs):

- Will form the **sensible connections in the K-12 instructional program** as students move from grade to grade.
- Will ensure **program consistency across the district** – from school to school and subject to subject.
- Will give students **access to the same essential learning regardless of who is teaching the class.**

## Working together to identify Essential Learner Outcomes (ELO)s:

- Promotes **clarity and consistent** priorities.
- Creates **ownership of the curriculum** among those who teach it.

## ELOs start with verbs!

Examples: demonstrate, create, locate, add, subtract, incorporate, ask, answer, structure, choose, find, compose, identify, recognize, solve, compute, interpret, select, apply, construct, develop, analyze, compare, describe, explain, organize, create, relate, summarize, predict, contrast, sequence, classify.

## 21st CENTURY STUDENT OUTCOMES

The Middleton-Cross Plains Area School District is committed to embedding 21<sup>st</sup> Century learning skills into the curriculum to ensure that students graduate with the skills they need to be successful in post-secondary education and the future workplace.

### **LEARNING AND INNOVATION SKILLS**

Learning and innovation skills increasingly are being recognized as those that separate students who are prepared for a more and more complex life and work environments in the 21st century, and those who are not. A focus on creativity, critical thinking, communication and collaboration is essential to prepare students for the future.

### **CREATIVITY AND INNOVATION**

#### ***Think Creatively***

- Use a wide range of idea creation techniques (such as brainstorming)
- Create new and worthwhile ideas (both incremental and radical concepts)
- Elaborate, refine, analyze and evaluate their own ideas in order to improve and maximize creative efforts

#### ***Work Creatively with Others***

- Develop, implement and communicate new ideas to others effectively
- Be open and responsive to new and diverse perspectives; incorporate group input and feedback into the work
- Demonstrate originality and inventiveness in work and understand the real world limits to adopting new ideas
- View failure as an opportunity to learn; understand that creativity and innovation is a long-term, cyclical process of small successes and frequent mistakes

#### ***Implement Innovations***

- Act on creative ideas to make a tangible and useful contribution to the field in which the innovation will occur

### **CRITICAL THINKING AND PROBLEM SOLVING**

#### ***Reason Effectively***

- Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation

#### ***Use Systems Thinking***

- Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems

#### ***Make Judgments and Decisions***

- Effectively analyze and evaluate evidence, arguments, claims and beliefs
- Analyze and evaluate major alternative points of view
- Synthesize and make connections between information and arguments
- Interpret information and draw conclusions based on the best analysis
- Reflect critically on learning experiences and processes

#### ***Solve Problems***

- Solve different kinds of non-familiar problems in both conventional and innovative ways
- Identify and ask significant questions that clarify various points of view and lead to better solutions

## **COMMUNICATION AND COLLABORATION**

### ***Communicate Clearly***

- Articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts
- Listen effectively to decipher meaning, including knowledge, values, attitudes and intentions
- Use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade)
- Utilize multiple media and technologies, and know how to judge their effectiveness a priority as well as assess their impact
- Communicate effectively in diverse environments (including multi-lingual)

### ***Collaborate with Others***

- Demonstrate ability to work effectively and respectfully with diverse teams
- Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal
- Assume shared responsibility for collaborative work, and value the individual contributions made by each team member

## **INFORMATION, MEDIA AND TECHNOLOGY SKILLS**

People in the 21st century live in a technology and media-suffused environment, marked by various characteristics, including: 1) access to an abundance of information, 2) rapid changes in technology tools, and 3) the ability to collaborate and make individual contributions on an unprecedented scale. To be effective in the 21st century, citizens and workers must be able to exhibit a range of functional and critical thinking skills related to information, media and technology.

## **INFORMATION LITERACY**

### ***Access and Evaluate Information***

- Access information efficiently (time) and effectively (sources)
- Evaluate information critically and competently

### ***Use and Manage Information***

- Use information accurately and creatively for the issue or problem at hand
- Manage the flow of information from a wide variety of sources
- Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information

## **MEDIA LITERACY**

### ***Analyze Media***

- Understand both how and why media messages are constructed, and for what purposes
- Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors
- Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media

### ***Create Media Products***

- Understand and utilize the most appropriate media creation tools, characteristics and conventions
- Understand and effectively utilize the most appropriate expressions and interpretations in diverse, multi-cultural environments

## **ICT (Information, Communications and Technology) LITERACY**

### ***Apply Technology Effectively***

- Use technology as a tool to research, organize, evaluate and communicate information
- Use digital technologies (computers, PDAs, media players, TPS, etc.), communication/networking tools and social networks appropriately to access, manage, integrate, evaluate and create information to successfully function in a knowledge economy
- Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information technologies

## **LIFE AND CAREER SKILLS**

Today's life and work environments require far more than thinking skills and content knowledge. The ability to navigate the complex life and work environments in the globally competitive information age requires students to pay rigorous attention to developing adequate life and career skills.

## **FLEXIBILITY AND ADAPTABILITY**

### ***Adapt to Change***

- Adapt to varied roles, jobs responsibilities, schedules and contexts
- Work effectively in a climate of ambiguity and changing priorities

### ***Be Flexible***

- Incorporate feedback effectively
- Deal positively with praise, setbacks and criticism
- Understand, negotiate and balance diverse views and beliefs to reach workable solutions, particularly in multi-cultural environments

## **INITIATIVE AND SELF-DIRECTION**

### ***Manage Goals and Time***

- Set goals with tangible and intangible success criteria
- Balance tactical (short-term) and strategic (long-term) goals
- Utilize time and manage workload efficiently

### ***Work Independently***

- Monitor, define, prioritize and complete tasks without direct oversight

### ***Be Self-directed Learners***

- Go beyond basic mastery of skills and/or curriculum to explore and expand one's own learning and opportunities to gain expertise
- Demonstrate initiative to advance skill levels towards a professional level
- Demonstrate commitment to learning as a lifelong process
- Reflect critically on past experiences in order to inform future progress

## **SOCIAL AND CROSS-CULTURAL SKILLS**

### ***Interact Effectively with Others***

- Know when it is appropriate to listen and when to speak
- Conduct themselves in a respectable, professional manner

### ***Work Effectively in Diverse Teams***

- Respect cultural differences and work effectively with people from a range of social and cultural backgrounds
- Respond open-mindedly to different ideas and values
- Leverage social and cultural differences to create new ideas and increase both innovation and quality of work

## **PRODUCTIVITY AND ACCOUNTABILITY**

### ***Manage Projects***

- Set and meet goals, even in the face of obstacles and competing pressures
- Prioritize, plan and manage work to achieve the intended result

### ***Produce Results***

- Demonstrate additional attributes associated with producing high quality products including the abilities to:
  - Work positively and ethically
  - Manage time and projects effectively
  - Multi-task
  - Participate actively, as well as be reliable and punctual
  - Present oneself professionally and with proper etiquette
  - Collaborate and cooperate effectively with teams
  - Respect and appreciate team diversity
  - Be accountable for results

## **LEADERSHIP AND RESPONSIBILITY**

### ***Guide and Lead Others***

- Use interpersonal and problem-solving skills to influence and guide others toward a goal
- Leverage strengths of others to accomplish a common goal
- Inspire others to reach their very best via example and selflessness
- Demonstrate integrity and ethical behavior in using influence and power

### ***Be Responsible to Others***

- Act responsibly with the interests of the larger community in mind

## **21st CENTURY STUDENT OUTCOMES**

The elements described below are the critical systems necessary to ensure student mastery of 21st century skills. 21st century standards, assessments, curriculum, instruction, professional development and learning environments must be aligned to produce a support system that produces 21st century outcomes for today's students.

### ***21st Century Standards***

- Focus on 21st century skills, content knowledge and expertise
- Build understanding across and among core subjects as well as 21st century interdisciplinary themes
- Emphasize deep understanding rather than shallow knowledge
- Engage students with the real world data, tools and experts they will encounter in college, on the job, and in life; students learn best then actively engaged in solving meaningful problems
- Allow for multiple measures of mastery

### ***Assessment of 21st Century Skills***

- Supports a balance of assessments, including high-quality standardized testing along with effective formative and summative classroom assessments
- Emphasizes useful feedback on student performance that is embedded into everyday learning
- Requires a balance of technology-enhanced, formative and summative assessments that measure student mastery of 21st century skills
- Enables development of portfolios of student work that demonstrate mastery of 21st century skills to educators and prospective employers
- Enables a balanced portfolio of measures to assess the educational system's effectiveness in reaching high levels of student competency in 21st century skills

### ***21st Century Curriculum and Instruction***

- Teaches 21st century skills discretely in the context of core subjects and 21st century interdisciplinary themes
- Focuses on providing opportunities for applying 21st century skills across content areas and for a competency-based approach to learning
- Enables innovative learning methods that integrate the use of supportive technologies, inquiry-and problem-based approaches and higher order thinking skills
- Encourages the integration of community resources beyond school walls

### ***21st Century Professional Development***

- Highlights ways teachers can seize opportunities for integrating 21st century skills, tools and teaching strategies into their classroom practice—and help them identify what activities they can replace/de-emphasize
- Balances direct instruction with project-oriented teaching methods
- Illustrates how a deeper understanding of subject matter can actually enhance problem-solving, critical thinking, and other 21st century skills
- Enables 21st century professional learning communities for teachers that model the kinds of classroom learning that best promotes 21st century skills for students
- Cultivates teachers' ability to identify students' particular learning styles, intelligences, strengths and weaknesses

- Helps teachers develop their abilities to use various strategies (such as formative assessments) to reach diverse students and create environments that support differentiated teaching and learning
- Supports the continuous evaluation of students' 21st century skills
- Encourages knowledge sharing among communities of practitioners, using face-to-face, virtual and blended communications
- Uses a scalable and sustainable model of professional development

### ***21st Century Learning Environments***

- Create learning practices, human support and physical environments that will support the teaching and learning of 21st century skill outcomes
- Support professional learning communities that enable educators to collaborate, share best practices and integrate 21st century skills into classroom practice
- Enable students to learn in relevant, real world 21st contexts (e.g., through project-based or other applied work)
- Allow equitable access to quality learning tools, technologies and resources
- Provide 21st century architectural and interior designs for group, team and individual learning
- Support expanded community and international involvement in learning, both face-to-face and online

## **K – 12 CURRICULUM AND INSTRUCTION TEAMS** **(Vertical Alignment by Curriculum Strands)**

Vertical alignment teams (K-12, K-5 or 6-12) are responsible for creating and updating the curriculum, instructional practices and assessment of each curriculum strand.

### **Curriculum Strands**

- Art (K – 12)
- Career and Technical Education (Family and Consumer Science, Health Science Occupations, Technology Education, Business Marketing, Informational Sciences) (K - 12)
- Counseling (K – 12)
- English, Language Arts, and Literacy (K – 12)
- Health and Physical Education (K – 12)
- Math (K – 12)
- Music (K – 12)
- Science (K – 12)
- Social Studies (K – 12)
- World Languages (6 – 12)

### **Suggested Team Membership**

One teacher representative from each elementary school.

Three teacher representatives from each middle school. (One teacher per grade level).

Four to six teacher representatives from Middleton High School, including the Department Coordinator.

One or two special education teachers

One or two principals will be assigned to each committee.

The Director of Professional Development.

The Assistant Superintendent of Educational Services and/or the Director of Teaching and Learning.

Each representative will have the following responsibilities:

1. Attend each meeting.
2. Report results at faculty meetings or team meetings.

# **INSTRUCTIONAL PROGRAM EVALUATION CYCLE**

Each Curriculum and Instruction Team will be responsible for completing the following tasks as part of the program evaluation process.

## **YEAR ONE:**

### **August – September:**

- Establishment of the Program Evaluation Committee and review the evaluation process and timeline.

### **September – December:**

- Investigate national and/or state standards and benchmarks and begin to learn about the Understanding by Design process and take an in depth look at Stage One components.
- Develop Big Ideas, Essential Learner Outcomes (ELOs), and Essential Questions of Stage One, and also develop a draft scope and sequence that ensures horizontal and vertical alignment.
- Review all pertinent achievement data including but not limited to:
  - state, local and national assessments
  - item analysis of assessments
  - course enrollment patterns
  - course grades
  - achievement among all demographic groups
  - graduation requirements
- Collect and analyze research articles and publications, and consult with experts on best practices in the field.
- Consider global connections that can be embedded into the instructional program.
- Develop a communication plan for gathering input from and providing information to colleagues that are not on the committee.

### **January – February:**

- Develop the criteria for evaluating the program based on desired outcomes of the evaluation process.
- Develop research questions to identify possible exemplary school districts in Wisconsin and beyond. The research should include curriculum materials, instructional practices, service-delivery models, etc.
- Research exemplary school districts to determine which districts meet some or all of our desired outcomes. This is done through web-resource searches and site visits.
- Continue to develop the components of Stage One.

**March – April:**

- Conduct site visits to exemplary school districts.
- Research and examine instructional materials options for possible pilots in year two.
- Decide on any small-scale changes that may occur in year two.
- Continue to develop the components of Stage One.
- Create a plan to develop common assessments aligned to the essential learner outcomes.
- Develop a plan for possible summer work.

**May:**

- Report out on site visits.
- Develop a plan for instructional materials pilots in year two, including professional development needs, communication and securing of the materials.

**Summer:**

- Training for pilot materials
- Complete any unfinished year-one work.
- Understanding by Design coursework and curriculum writing focusing on Stages One and Two.

**YEAR TWO:****September - December:**

- Decide on possible new courses and/or changes in course sequence and determine teacher-licensing requirements.
- Check in on the progress of the instructional materials pilots.
- Continue to develop common assessments.

**January – March:**

- Evaluate instructional materials pilots.
- Select new instructional materials to be implemented in year three.
- Develop the implementation plan for any changes to the program, including communication, professional development, technology needs and purchasing of new materials.

**April:**

- Work with Director of Professional Development to plan for implementation training.

- Revisit curriculum writing of UbD Units.

**May:**

- Secure quotes for instructional materials and technology equipment.

**Summer or Fall:**

- Train for implementation of new instructional materials.
- Complete curriculum writing of UbD Units.

**YEAR THREE:**

**September:**

- Finishing any training for new instructional materials.
- Implementation of new instructional materials and program changes.

**October – April:**

- Monitor implementation fidelity.
- On-going data gathering from common and standardized assessments.
- Work with Director of Professional Development for on-going professional development and support.

## Middleton-Cross Plains Area School District

### Instructional Program Evaluation Cycle

	08 – 09	09 – 10	10 – 11	11 – 12	12 – 13	13 – 14	14 – 15
<b>Year # 1</b> <ul style="list-style-type: none"> <li>• Develop draft of Stage One</li> <li>• Review data</li> <li>• Research</li> <li>• Develop communication plan</li> <li>• Create program and materials evaluation criteria</li> <li>• Site Visits</li> <li>• Professional Development</li> </ul>	6-12 World Languages  K-8 Science  6-12 Math	6-12 CTE  9-12 Science  K-12 Social Studies  K-12 Counseling	K-12 English/Lang Arts/Literacy  K-12 Gifted & Talented Plan	K-12 Art  K-12 Music	K-12 PE/Health	K-12 Math	6-12 World Languages
<b>Year # 2</b> <ul style="list-style-type: none"> <li>• Recommendations/Changes</li> <li>• Budget</li> <li>• Develop Implementation Plan</li> <li>• Approval of Curriculum Materials</li> <li>• Continued Professional Development</li> <li>• Continue Stage One/Draft of Stage Two/Stage 3</li> </ul>		6-12 World Languages  K-8 Science  6-12 Math	6-12 CTE  9-12 Science  K-12 Social Studies  K-12 Counseling	K-12 English/Lang Arts/Literacy  K-12 Gifted & Talented Plan	K-12 Art  K-12 Music	K-12 PE/Health	K-12 Math
<b>Year # 3</b> <ul style="list-style-type: none"> <li>• Implementation</li> <li>• Data Gathering</li> <li>• On-going Professional Development</li> </ul>	6-8 English/ Language Arts  11-12 Psychology		6-12 World Languages  K-8 Science  6-12 Math	6-12 CTE  9-12 Science  K-12 Social Studies  K-12 Counseling	K-12 English/Lang Arts/Literacy  K-12 Gifted & Talented Plan	K-12 Art  K-12 Music	K-12 PE/Health

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## Middleton-Cross Plains Area School District

### Instructional Program Evaluation Cycle (Continued)

	15 – 16	16 – 17	17 – 18	18 – 19	19 – 20	20 – 21	21 – 22
<b>Year # 1</b> <ul style="list-style-type: none"> <li>• Develop draft of Stage One</li> <li>• Review data</li> <li>• Research</li> <li>• Develop communication plan</li> <li>• Create program and materials evaluation criteria</li> <li>• Site Visits</li> <li>• Professional Development</li> </ul>	K-12 Science	K-12 Social Studies  K-12 CTE	K-12 English/Lang Arts/Literacy  K-12 Gifted & Talented Plan	K-12 Art  K-12 Music	K-12 Counseling  K-12 PE/Health	K-12 Math	6-12 World Languages
<b>Year # 2</b> <ul style="list-style-type: none"> <li>• Recommendations/Changes</li> <li>• Budget</li> <li>• Develop Implementation Plan</li> <li>• Approval of Curriculum Materials</li> <li>• Continued Professional Development</li> <li>• Continue Stage One/Draft of Stage Two/Stage 3</li> </ul>	6-12 World Languages	K-12 Science	K-12 Social Studies  K-12 CTE	K-12 English/Lang Arts/Literacy  K-12 Gifted & Talented Plan	K-12 Art  K-12 Music	K-12 Counseling  K-12 PE/Health	K-12 Math
<b>Year # 3</b> <ul style="list-style-type: none"> <li>• Implementation</li> <li>• Data Gathering</li> <li>• On-going Professional Development</li> </ul>	K-12 Math	6-12 World Languages	K-12 Science	K-12 Social Studies  K-12 CTE	K-12 English/Lang Arts/Literacy  K-12 Gifted & Talented Plan	K-12 Art  K-12 Music	K-12 Counseling  K-12 PE/Health

October 6, 2011

# **Addendum:**

- **Action Verbs for ELO Development**
- **Blooms Taxonomy**
- **Understanding by Design Curriculum Template**
- **Textbook and Instructional Materials Forms**

Adapt  
Adjust  
Analyze  
Apply  
Appraise  
Argue  
Articulate  
Ask  
Assess  
Brainstorm  
Build  
Calculate  
Challenge  
Check  
Classify  
Clarify  
Collect  
Combine  
Compare  
Complete  
Compute  
Conclude  
Conduct  
Connect  
Consider  
Construct  
Contrast  
Correct  
Create  
Critique  
Decide  
Deduce  
Defend  
Define  
Demonstrate  
Derive  
Describe  
Design  
Detect  
Develop  
Devise

Differentiate  
Discuss  
Display  
Distinguish  
Document  
Draft  
Engage  
Establish  
Estimate  
Evaluate  
Examine  
Exhibit  
Experiment  
Explain  
Explore  
Express  
Find  
Gather (evidence)  
Generalize  
Give (reasons, examples)  
Help  
Hypothesize  
Identify  
Illustrate  
Incorporate  
Induce  
Inquire  
Inspect  
Instruct  
Integrate  
Interact  
Interpret  
Invent  
Investigate  
Judge  
Justify  
Label  
Locate  
List  
Make  
Model

Modify  
Monitor  
Organize  
Participate  
Perform  
Plan  
Pose problems  
Predict  
Present  
Prioritize  
Produce  
Propose  
Prove  
Pursue  
Question  
Rate  
Reason  
Recognize  
Reflect  
Represent  
Research  
Respond  
Retrieve  
Review  
Revise  
Role-play  
Search  
Seek  
Select  
Show  
Solve  
Structure  
Support  
Synthesize  
Teach  
Test  
Translate  
Use  
Utilize  
Visualize

**BLOOM'S TAXONOMY "Revised"**  
**Key Words and Instructional Strategies**

<b>I. REMEMBER (KNOWLEDGE)</b>		
<b>Verbs for Objectives</b>	<b>Model Questions</b>	<b>Learning Strategies</b>
choose describe define identify label list locate match memorize name omit recite recognize retrieve select state	Who? Where? Which One? What? How? What is the best one? Why? How much? When? What does it mean?	Bookmarking Bullet Pointing Highlighting Rehearsal Memorizing Mnemonics Searching Social Networking

<b>II. UNDERSTAND (COMPREHENSION)</b>		
<b>Verbs for Objectives</b>	<b>Model Questions</b>	<b>Learning Strategies</b>
classify compare defend demonstrate distinguish exemplify explain express extend illustrate indicate interrelate interpret infer judge match paraphrase represent restate rewrite select summarize	State in your own words Which are facts? What does this mean? Is this the same as...? Give an example. Select the best definition. Condense this paragraph. What would happen if...? State in one word... Explain what is happening. What part doesn't fit? Explain what is meant. What expectations are there? Read the graph (table). What are they saying? This represents... What seems to be...? Is it valid that...? What seems likely? Show in a graph, table.	Advanced Searching Boolean Searching Blog journaling Twittering Categorizing Tagging Commenting Annotating Subscribing Give key examples Emphasize connections Elaborate concepts Create visual representations (concept maps, outlines, flow charts, organizers, analogies, pro/con grids)

### III. APPLY

Verbs for Objectives	Model Questions	Learning Strategies
apply carry out choose dramatize execute explain generalize implement judge operate organize paint prepare produce select show sketch solve use	Predict what would happen if Choose the best statements that apply Judge the effects What would result Tell what would happen Tell how, when, where, why Tell how much change there would be Identify the results of	Editing Modeling Cognitive apprenticeships "Mindful" practice—NOT just a "routine" practice Part and whole sequencing Authentic situations "Coached" practice Case studies Simulations Algorithms

### IV. ANALYZE

Verbs for Objectives	Model Questions	Learning Strategies
analyze categorize classify compare deconstruct differentiate distinguish identify infer organize point out select subdivide survey	What is the function of...? What's fact? Opinion? What assumptions...? What statement is relevant? What motive is there? Related to, extraneous to, not applicable. What conclusions? What does the author believe? What does the author assume? Make a distinction. State the point of view of... What is the premise? State the point of view of... What ideas apply? What ideas justify the conclusion? What's the relationship between? The least essential statements are What's the main idea? Theme? What inconsistencies, fallacies? What literary form is used? What persuasive technique?	Attributing Outlining Finding Structuring Integrating Mashing Linking Validating Reverse engineering Media clipping Models of thinking Challenging assumptions Retrospective analysis Reflective journaling Debates Discussions and other collaborating learning activities Decision-making situations

V. EVALUATE		
Verbs for Objectives	Model Questions	Instructional Strategies
appraise check criticize compare defend detect hypothesize judge monitor test	What fallacies, consistencies, inconsistencies appear? Which is more important, moral, better, logical, valid, appropriate? Find the errors.	Blog commenting Reviewing Posting Moderating Collaborating Networking Refactoring Testing Challenging assumptions Journaling Debating Discussing Decision-making situations

VI. CREATE (SYNTHESIS)		
Verbs for Objectives	Model Questions	Instructional Strategies
choose combine compose construct create design develop devise formulate hypothesize invent make make up originate organize plan produce program role play tell	How would you test...? Propose an alternative. Solve the following. How else would you...? State a rule.	Modeling Challenging assumptions Reflective journaling Debating Discussing Collaborating Designing Decision-making situations Filming Animating Video blogging Mixing/Remixing Wiki-ing Publishing Video-casting Podcasting Directing Broadcasting



## Stage 2 – Assessment / Evidence of Understanding

**Pre- Assessment:** *What pre-assessments will you use to check students' prior knowledge, skill levels, and potential misconceptions?*

**Evaluation CRITERIA:** *What criteria will be used in each assessment to evaluate attainment of the desired results?*

Conceptual Understanding(s):

Thinking Skill(s):

Communication Skill(s):

Product/Process Quality:

**OTHER EVIDENCE / Formative Assessments:** *Students will show they have achieved Stage 1 goals by...*

**PERFORMANCE TASK(S)/Summative Assessment:** *Students will show that they really understand by evidence of...*

### Stage 3 – Learning Plan

Day/ Time	Stage 1 Coding	WHERE TO Coding	Learning Events: <i>Student success at transfer, meaning, and acquisition depends upon . . .</i>	Pre/Formative Assessment: <i>How will students get the feedback they need?</i>	Possible Differentiation Components:

# Understanding by Design Textbook Adoption Criteria

By Grant Wiggins

Coauthor, with Jay McTighe, of *Understanding by Design*

Over the years, educators have often asked what to consider when evaluating textbooks in the context of Understanding by Design (UbD). In recent years many publishers have begun to use UbD terminology (e.g., “the big idea” or “essential questions”) as a way to label their books without necessarily integrating the UbD approach. Below is a series of questions to evaluate the fidelity of a textbook program to UbD and help inform your adoption decision. A total score of more than 60 (an average rating of at least 3 on each question) would be needed in order to make the claim that the text is faithful to the UbD approach.

Rate textbooks on each criterion using a 1–4 scale. ① not at all ② rarely ③ usually ④ always

## Do the materials really stay focused on big ideas? Or do they just mention them in passing and focus on content?

Materials provide:

- A few “big” questions and ideas—concepts, themes, issues—worthy of intense study  
① ② ③ ④
- Questions and issues that are vital and thought-provoking, not just “teacherly”  
① ② ③ ④
- Chapters and units that are not only introduced with a key question, concept, or strategy, but are explicitly organized around them  
① ② ③ ④
- A layout that focuses learner’s attention on a few key understanding-related goals without endless distractions  
① ② ③ ④

## Do the materials continually revisit big ideas? Or is each idea addressed once, superficially?

Materials provide:

- Chapters and units that use *recurring* “big” ideas and questions to develop ideas in greater depth, and from different perspectives  
① ② ③ ④
- Study guides and graphic organizers that help students stay focused on the big picture  
① ② ③ ④

- Assessments and activities that ask students to reconsider their previous answers and textbook claims from previous lessons, units and/or chapters  
① ② ③ ④

## Do the materials consistently require learners to draw inferences beyond what is stated in the text? Or are the learning activities predominantly low-level and devoted mostly to learning content without larger purposes or tasks?

Materials provide:

- Continual opportunities for students to go beyond the content to make important generalizations, conclusions, and other inferences  
① ② ③ ④
- Work that requires the “six facets of understanding”—students must explain, interpret, apply, consider varied perspectives, empathize, and explore their own perceptions  
① ② ③ ④
- Real problems that require strategy and careful thought, not just simple exercises that only reinforce the content just taught  
① ② ③ ④
- Ample opportunities to use high-level processes, e.g., research, scientific inquiry, strategic reading, writing, problem solving and decision making  
① ② ③ ④

(continued on other side)

**Do the materials include many assessments of student understanding (meaning-making and transfer)? Or are most of the assessments focused on recall and “plugging in” of the recently-covered content?**

Materials provide:

- Assessments that require students to go beyond what was covered in the chapter: links to issues in other chapters, transfer of learning to relevant real-world contexts, in-depth connections to local or present circumstances, and so on  
① ② ③ ④
- Tips to both teachers and students about common misconceptions or problems with transfer, and what to do about each  
① ② ③ ④
- Formative assessments during the units to gauge student understanding, and useful instructional tips for how to remediate in the absence of adequate understanding  
① ② ③ ④
- Transfer tasks that require students to apply their learning in varied and realistic contexts, mindful of purpose, audience, and setting  
① ② ③ ④

**Do the materials contain interesting, challenging, and varied learning activities? Or is the material as presented in the text likely to encourage too much teacher talk, dull exercises, and/or passive and purposeless learning?**

Materials provide:

- Activities that help students engage right from the start with important ideas and issues  
① ② ③ ④

- Narrative that doesn't overwhelm learners with technical vocabulary and facts before they are needed  
① ② ③ ④
- Varied work that helps students work individually and collectively on worthy challenges/problems/projects to further their understanding and their ability to use it  
① ② ③ ④
- Explicit advice to teachers on how to use different instructional strategies and classroom structures to make learning engaging as well as effective  
① ② ③ ④

**Do the materials encourage increasing student autonomy and strategic decisions in students' work? Or are students just expected to march through content in a highly directed way?**

Materials provide:

- Activities and assessments that require increased student strategic thinking about what is being asked by a question, how to plan, what materials and past content to use, what to do when stuck, and so on  
① ② ③ ④
- Work that provides students with fewer and fewer obvious clues, scaffolding, and hand-holding as to what content the activity/test question requires  
① ② ③ ④