



Creating 21st Century Classrooms: Connecting the Dots IV

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The Burlington School District &
The Vermont Department of Education

Instructor: Ed Barry

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Table of Contents

Syllabus	4 - 14
Responsibility Overview	15 - 17
School Administrator's Plan	18
Web 2.0/Open Source	19
Web 2.0/Open Source Template	20
Unit Expectations	21
Unit Process & Timeline	22-23
Unit Design Template	24- 25
Lesson Template	26 - 27
Assessment Template	28

DOTS IV – SYLLABUS St. Michael's College



**Developing 21st Century Classrooms:
Connecting the Dots**

Start Date: May 25, 2011

End Date: August 1, 2011

Ed Barry, M.Ed.

Course Description:

Developing 21st Century Classrooms: Connecting the Dots IV is a professional development institute co-sponsored by the Burlington School District and funded by The Vermont Department of Education, Title IID: Enhancing Education Through Technology competitive grant program. The purpose of the institute is to support three-person teams of Vermont educators as they reinvent and transform Vermont classrooms to develop 21st century skills for learning. Team members may be comprised of two teachers from any content area (grades 3 -12) and a school Principal, Assistant Principal of Curriculum Coordinator. Participants who successfully complete the course will earn three graduate credits from St. Michael's College in Colchester, Vermont.

By participating in *Developing 21st Century Classroom: Connecting the Dots IV*, team members will gain a greater understanding of *Vermont's Transforming Schools into 21st Century Learning Environments* project, *The Partnership for 21st Century Skills*, effective teaching practices using web 2.0 tools, and the "refreshed" *National Educational Technology Standards for Students and Teachers*. Core principles of 21st century classrooms will be examined through a series of hands-on workshops.

Team members will apply the content knowledge and pedagogy gained through the workshops and add it to their past experiences to create standards-based units of study that exemplify best practice and attributes of 21st century classrooms. Completed units must be interdisciplinary, inquiry-based, and follow the Understanding by Design format. Participants will employ modern technology tools and resources as they develop, implement, and disseminate these units of study and resources. The conceptual framework of the unit development begins with full day meeting in May (1). Between the May meeting and June meeting dates (4) participants will develop the basic essentials of their units including identifying their Enduring Understanding and Essential Questions and upload these to a Group Area in VITA-Learn portal. During the June meeting dates participants engage in activities intended to strengthen their understanding and practices in student-centered learning, project/inquiry based learning, differentiated instruction, and effective technology integration. Additionally, they will share their knowledge about web 2.0 tools and resources. Lesson development and additional professional development continues on-line between June and our July meeting dates (2). The course instructor and other educational consultants will provide on-line feedback during this time. A culminating unit presentation will take place on August 1st.

The VITA-Learn.org portal serves as a conduit for the exchange of ideas and discussion that takes place during the institute. The Vermont Learning Village portal will be used to store and share the units of study created by participants.

Goals: The goal of this course is to prepare Vermont educators to meet state and national educational standards as follows

National Educational Standards for Teachers (NETS-T 2008)

- Facilitate and Inspire Student Learning and Creativity: Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers:
 - promote, support, and model creative and innovative thinking and inventiveness
 - engage students in exploring real-world issues and solving authentic problems using digital tools and resources
 - promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
 - model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments
- Design and Develop Digital-Age Learning Experiences and Assessments: Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S. Teachers:
 - design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity
 - develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
 - customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
 - provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching
- Model Digital-Age Work and Learning: Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers:
 - demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
 - collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
 - communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats
 - model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning
- Promote and Model Digital Citizenship and Responsibility: Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. Teachers:
 - advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
 - address the diverse needs of all learners by using learner-centered strategies and providing equitable access to appropriate digital tools and resources
 - promote and model digital etiquette and responsible social interactions related to the use of technology and information

- develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools
- Engage in Professional Growth and Leadership: Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers:
 - participate in local and global learning communities to explore creative applications of technology to improve student learning
 - exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others
 - evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
 - contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

Enduring Understanding: The ability to adapt to rapid change will determines one's ability to thrive in the 21st century.

Essential Questions:

- What are the biggest challenges that our children will be facing, in the next 20 years, and how are we preparing them to face these challenges?

Topical Questions:

- What are 21st century skills and dispositions?
- How can web 2.0 tools support 21st century learning?
- What makes a 21st century unit of study different from current standards-based units of study?

Understanding:

Participants will understand that ...

- there are certain principles of best practice within their specified content areas
- the principles of constructivism and student-centered learning encourage students to own their learning.
- inquiry-based learning requires students to think critically about big questions.
- differentiated instruction techniques allow all students to learn at their own pace
- fashioning a unit using "understanding by design" thinking ensures that students are truly understanding and transferring their learning.
- 21st century standards for students are critical thinking skills for students.
- National Educational Technology Standards for Students (2007) help to define these critical thinking skills.
- social networking and web 2.0 tools are tools that allow students to both engage in and express their learning beyond the walls of the classroom and the pages of a book.
-

Learning Outcomes:

Participants will know ...

- which web 2.0 tools enhance learning and collaboration
- which VT-GE's and/or Common Core standards will be taught in their specified content areas
- the elements that comprise a unit using the “backward design” model (Wiggins and McTighe)
- the difference between pre-,formative, and summative assessments and how to effectively use them to assess student learning
- the techniques for using collaborative learning tools

Participants will be able to ...

- design a standards-based unit of study using “backward design”
- differentiate instructional activities
- design effective assessments for standards-based units of study
- use and integrate web 2.0 tools into instructional activities
- develop a unit of study using the Vermont Learning Village portal
- create multimedia learning objects to support educational concepts
- document personal growth through written reflection
- create a unit that engages students in a meaningful, big picture, relevant learning experience

Evaluation/Assessment

The following performance tasks and activities will be used to evaluate/assess participant performance in this course:

Web 2.0 Tools. Team members will be asked to give a 30-minute presentation of one web 2.0 tool during the summer institute.

Unit of Study: Each pair of teachers will create one interdisciplinary unit of study that meets content standards, Vermont Grade Expectations assessments, and integrates technology and web 2.0 tools as specified in the unit assessment/feedback rubric (see attached). Each unit of study must be entered in the Vermont Learning Village database or other designated portal and shared publicly.

Reflection Assignments: Participants will be asked to write reflections at the end of the institute.

Performance Task	Percentage of Grade
Web 2.0 Tools (web 2.0 presentation)	15
Unit of Study (completed projects shared in Learning Village or other identified portal and evaluated using the attached rubric)	50
Works collaboratively, solves problems effectively, uses feedback appropriately, meets deadlines, assesses your own progress, and maintains a positive attitude.	15
Culminating presentation of work	10
Final Reflection Paper	10
Total	100%

General Course Information

The following are necessary for successful completion of this course:

- Active participation
- Completion of readings
- Completion of assignments including on-line unit development and feedback process and completed unit of study in Vermont Learning Village

Attendance Expectations:

- Attendance at all face-to-face sessions
- Active participation in all class discussions and activities
- Meets deadlines for on-line submissions

Required Readings (course textbooks supplied by instructors):

Boss, S., Krauss, J. (2007). *Reinventing Project-based Learning: Your Field Guide to Real-World Projects in the Digital Age*. Eugene, OR: International Society for Technology in Education.

Tomlinson C. ., McTighe, J. (2006). *Integrating Differentiated Instruction & Understanding by Design. Connecting Kids & Content*: Association for Supervision and Curriculum Development.

Barry, E. and others (2010), *Transformation & Technology: A New Way of Learning - ClassroomScenarios*

Barry, E. and others (2010), *The Revised Vermont Technology Grade Expectations*

Anticipated Course Dates/Sequence: The following is subject to change based on instructor and participant needs.

Dates	Hours	Total Hours	Comments
May 25, 2011	8:00-4:00 p.m.	8 hours	<p>Champlain College, Burlington, Vermont</p> <p>This full day session is designed to introduce institute goals and expectations and to introduce participants to software and electronic tools integrated in the course of study.</p> <p>8:00 – 8:30 Food/drink & conversation Distribution of books and other materials Discussion of housing - Ed</p> <p>8:30 – 9:00 - Introductions & Course Registration</p> <p>9:00 – 10:00 Opening Remarks – Ed Overview of expectations and individual responsibilities - Ed</p> <p>10:00 – 10:15 – UBD pre-assessment – Kathy Barwin</p> <p>10:15 – 10:30 - Break</p> <p>10:30 – 11:00 – Role of the Principal – Paul Irish</p> <p>11:00 – 12:00 – SAMR Scenarios - Ed</p> <p>12:00 – 12:45 – Lunch</p> <p>12:45 – 1:30 – Web 2.0 Assignments</p> <ul style="list-style-type: none"> - Review expectations <ul style="list-style-type: none"> o Answer questions – What, How, Educational uses o Creative, entertaining, fun o Post Resource to VITA-Learn - Select Web 2.0 tool - Select Presentation time <p>Note: Teachers are mainly responsible for developing and presenting the Web 2.0 presentation. (Principals will not be there on the 4th day of presentations so it would be very difficult to include them)</p> <p>1:35 - 3:00 – UBD Overview – Kathy</p> <p>3:00 – 3:45 – iPad distribution and demonstration</p> <p>3:45 – 4:00 – Review what they should (and should NOT) do between now and our June meetings</p> <ul style="list-style-type: none"> - Work on Enduring Understanding - Work on Essential Questions - Do NOT work on unit specifics or lessons at this time!!

<p>June 27-30, 2011</p>	<p>8:30-4:30 p.m.</p>	<p>32 hours</p>	<p>Monday– June 27</p> <p>8:00 – 8:30 – Continental Breakfast 8:30 – 8:45 – Overview of Week & Q/As 8:45 – 9:15 – Web 2.0 presentation 9:15 – 9:30 - Break 9:30 – 11:00 – Student-centered learning – Ed 11:00 – 12:00 – Technology & The School Administrator - Paul 12:00 – 12:45 – Lunch 12:45 – 1:15 – Web 2.0 presentation 1:15 - 3:00 – UBD - Kathy 3:10 – 4:30 – Team Time Unit Development</p> <p>Tuesday – June 28</p> <p>8:00 – 8:30 – Continental Breakfast 8:30 – 8:45 – Q & A 8:45 – 9:15 – Web 2.0 presentation 9:15 – 9:30 - Break 9:30 – 11:00 – Project-based Learning - Sandy 11:00 – 12:00 – Technology & The School Administrator – Part II - Paul 12:00 – 12:45 – Lunch 12:45 – 1:15 – Web 2.0 presentation 1:15 - 3:00 – UBD – Part II - Kathy 3:10 – 4:30 – Team Time Unit Development</p> <p>Wednesday – June 29</p> <p>8:00 – 8:30 – Continental Breakfast 8:30 – 8:45 – Overview of Week & Q/As 8:45 – 9:15 – Web 2.0 presentation 9:30 – 11:00 – NETS- Scenarios- TGEs – Ed 11:00 – 12:00 – Technology & The School Administrator – Part III - Paul 12:00 – 1:00 – Lunch 1:00 – 1:30 – Web 2.0 presentation 1:30 - 3:00 – Summative Assessment - Kathy 3:10 – 4:30 – Team Time Unit Development</p> <p>Thursday – June 30</p> <p>8:00 – 8:30 – Continental Breakfast 8:30 – 8:45 – Overview of Week & Q/As 8:45 – 9:15 – Web 2.0 presentation 9:30 – 11:00 – Collaborative Learning – Sigrid Lumbra</p>
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			<p>11:00 – 12:00 – Sharing by Grade Levels 12:00 – 1:00 – Lunch 1:00 – 1:30 – Web 2.0 presentation 1:30 - 3:00 – Summative Assessment - Kathy 3:10 – 4:30 – Team Time Unit Development</p>
July 18-19, 2011	8:00-4:30 p.m.	16 hours	<p>Monday – July 18th</p> <p>8:00 – 8:30 – Continental Breakfast 8:30 – 8:45 – Overview of Week & Q/As 8:45 – 11:30 - Feedback meetings with Ed & Kathy 8:45- 11:30 – Work on units – team time 11:30 – 12:00 – More Web 2.0 – Ed or Paul 12:00 – 1:00 – Lunch 1:00 – 1:30 – VITA-Learn Overview – Part 1 1:30 – 2:00 – Units in Riverdeep and VITA-Learn – review previous units 2:00 – 3:00 – Sharing by content area. 3:00 – 4:30 – More Web 2.0 – Ed or Paul</p> <p>Tuesday– July 19th</p> <p>8:00 – 8:30 – Continental Breakfast 8:30 – 8:45 – Overview of Week & Q/As 8:45 – 11:30 - Optional feedback meetings with Ed & Kathy 8:45- 11:30 – Work on units – team time 11:30 – 12:00 – More Web 2.0 – Ed 12:00 – 1:00 – Lunch 1:00 – 1:30 – VITA-Learn Overview – Part 2 1:30 – 2:30 – Panel of Previous Dots Participants 2:30 – 4:30 – Preparing for final day presentations.</p>
August 1, 2011	8:30-3:30 p.m.	7 hours	<p>Finish unit and upload all lessons and activities to Vermont Learning Village portal by this date. Final reflection posted in VITA-Learn/Learning Village Culminating meeting with students to share final projects Location: Champlain College</p>

Creating 21st Century Classrooms: Connecting the Dots IV Unit Rubric

This rubric will be used in combination with feedback written directly into the unit and lesson plan/scenarios. It will be used as feedback for the whole unit with all the accompanying lessons/scenarios, not the individual lessons/scenarios. As you plan your unit, you should refer to this rubric to guide your work.

Part 1	Not Present	Some Evidence	Solid evidence
The Unit contains an Enduring Understanding (EU).			
The Enduring Understanding addresses a critical concept in the content and can be applied across disciplines.			
The EU is relevant to students' lives, both now and for the future.			
The unit contains Essential (EQ) Questions (generally no more than 3).			
The EQ's reflect higher order thinking skills, can be answered in a multitude of ways, and go beyond regurgitation of content facts.			
The unit contains Knows, Understands, Do's. (KUD).			
The KUD's reflect significant understandings and appropriate skills and processes (higher order thinking skills).			
The KUD's clearly relate to the Grade Expectations (GE's or Common Core) that were identified AND relate to each other (they are aligned, rather than a being separate and/or disconnected). Interdisciplinary GE's/CC are included.			
The SUMMATIVE assessment clearly addresses the Enduring Understanding, and incorporates the KUD's articulated for the lesson. It is also a clear opportunity for students to apply their			

learning in a relevant, authentic, meaningful way.			
In total, the Lessons/Scenarios adequately address the Enduring Understanding			
The Lessons/Scenarios address the Essential Questions in an adequate manner.			
In total, all of the KUDs are adequately addressed in the Lessons/Scenarios			
The developer addresses Pre and Formative Assessment in a manner that will allow them to adjust instruction to meet the needs of individual learners as the unit progresses.			
Comments: NOTE: The word “addressed” used above is not intended to mean they should be specifically stated but rather one should be able to see the connection between the formal language used in the unit and the scenario descriptions.			
Part 2	Not Present	Some Evidence	Solid evidence
The lessons/scenarios reflect the basic principles of Student Centered Learning as discussed in the workshop. Throughout the unit, the ratio of teacher-led instruction vs. student-led inquiry appropriately matches this approach.			
Differentiation is clear and obvious, through the articulation of specific differentiation strategies, relative to pre-and formative assessments. Individual learning styles are addressed, as well as readiness and interest.			
Students are involved in a <u>significant</u>			

collaborative experience that requires them to use various technology tools to reach beyond the walls of their classroom and school and interact with others in a distant location.			
Technology, especially the use of Web 2.0 tools/sites, is used effectively to meaningfully extend and expand student learning opportunities, and are directly connected to the KUD's.			
The lessons/scenarios reflect an Inquiry or Project Based approach			
Students are engaged in authentic, challenging work with real world connections and work with "experts" in the field they are studying.			
"Students share their newly created knowledge with authentic audiences in real world settings.			
21st Century Skills are identified and addressed in a purposeful manner			
Technology is used as a tool for student collaboration and communicating by sharing their knowledge with a larger audience.			
Comments:			

Responsibilities - Overview

*This is an important document as it summarizes your responsibilities.
Please keep it handy and refer to it often.*

1. Web 2.0 Team Presentations

- a. Your team will prepare your presentation between May and June 2011
- b. The two teachers on the team should play a nearly equal role.
- c. Your presentation should be approximately ½ hour
- d. You must create a complementary presentation that you will post in the Resources section of VITA-Learn. This can take several forms including a video, a PowerPoint, Jing, etc.
- e. Creativity REALLY counts!

2. Unit Expectation

Due Date	Event
June 27	Enduring Understanding and Essential Questions
July 14	First draft of unit, assessment and individual lesson plans due
July 31	Final draft of units (unit overview, lessons, assessments) uploaded to designated site

- a. The two teachers will create one unit as described in the accompanying document.
- b. Please be sure and use the Unit Template we provide for submitting drafts for feedback.

3. Lesson Development

- a. Each unit will be accompanied by multiple lessons. The lessons will spell out the specific detailed steps on how to implement it. All resources will be listed and completely cited and whenever available hyperlinks will be made to them. Activities, as appropriate, will be attached to each lesson. Lesson plan should contain enough detail so that other educators could use it to implement a similar lesson.
- b. Lesson Development –specific details of the lesson plans must wait until after the June meetings as the information you receive during those days will have significant impact on the development of them.
- c. Please do not make each lesson longer than a few days at the most. Do not cram multiple lessons into one.

- d. Please be sure to use the Lesson Template that we provide.

4. Assessments

- a. The Summative Assessment will be started in June during the workshops and be completed by July 14.
- b. Pre-assessments - Your unit, and lessons as appropriate, should include pre-assessments. These should be obvious and labeled as such.
- c. Formative assessments should purposefully occur throughout all lessons. Please label even if it is obvious.
- d. Summative assessment(s) – We encourage you to use a performance-based summative assessment. Please remember to differentiate, as needed, according to individual learning styles.

5. Administrator's Plan

1. A draft of your plan is due to Paul Irish (pirish@bsdvt.org) by July 14, 2011. Paul will give you feedback prior to July 22, 2011.
2. Your final plan should be sent to Paul by July 31, 2011 and also be ready to be presented on August 1, 2011 at the final meeting.

6. General Expectations:

1. **Unit Selection** – Past history has shown us that when people select a unit they have previously taught they tend to insert (some very nice) technology into the unit, but it doesn't always incorporate the changes we are looking for. This isn't about just incorporating technology into your lessons but rather making transformational change in the way we approach teaching and learning with students. Consequently, we suggest you plan on either developing an entirely new unit of study, or if you wish to use a topic from an older unit, be willing to throw out the old unit and start from scratch.
2. **Deadlines** - It is of critical importance that you meet all deadlines on time. This is especially true in sending us drafts.
3. **Units and lessons** – do not put two weeks of lessons into one lesson plan. A lesson plan should generally not cover more than from 1 to 3 days.
4. **Creating for others** - You are creating a unit of study and lessons for other Vermont educators to access. They need in-depth detail. You must also list and cite all your resources.

5. **Summative Assessment** should be described in full at the Unit level. If this is not possible, clearly describe where it is.

6. **Written Reflection** – Participants must write a one to two page written reflection of their personal Dots IV experience at the end of the institute. This is due August 8, 2011. Please email it to edbarry101244@gmail.com Please include the following:
 - a. In what ways was the unit you created significantly different from past units?
 - b. What impact has the experience had with the way you teach... or plan to teach in the future?
 - c. Explain how your view of how technology can enhance and extend learning has grown and/or changed.
 - d. Personal reflection.

School Administrator Creating a School-Based “Dots” Plan

We ask that you create a modest school level plan to inform other teachers in the school about the following...

- The process the participant(s) in your school went through in the Dots IV program
- The unit they developed and the implementation of it
- Key points of the Pedagogy emphasized in the Dots Program
- How they used technology and especially Web 2.0 to increase the effectiveness in the teaching and learning process.
- The “Transformation & Technology: A New Way of Learning” Classroom Scenarios document
- The newly revised “Vermont Technology Grade Expectations.”

Please note that this is not a “full blown” plan to implement something new. This plan is intended to “inform” others. Once this has occurred, we leave it up to you what the next steps might be... but those steps are beyond the scope of this plan.

Although there are several ways to accomplish this task of informing the faculty, we envision that the first four bullets above might be addressed by the Dots IV participating teacher(s) and the last two bullets by the teacher(s) and the administrator together. Further, we might suggest that you consider breaking these down into three pieces... the Dots program being one piece, the scenarios another and the VT TGEs a third.

This plan should be implemented in the coming school year.

There is no specific format to the plan. However, it should include enough detail so that the readers can get a clear picture of how you will approach this task.

We are here to assist you in the development of this plan. Please feel free to consult with us at any time.

A draft of your plan is due to Paul Irish (pirish@bsdvt.org) by July 14, 2011. Paul will give you feedback prior to July 22, 2011. Your final plan should be sent to Paul by July 31, 2011 and also be ready to be presented on August 1, 2011 at the final meeting.

Developing 21st Century Classrooms III

Web 2.0/Open Source Presentations

In order for the participants to learn more about and make use of Web 2.0/Open Source tools in the creation and implementation of their units, we are going to spend some time learning more about them each day in June. In the interest of “student-centered-learning,” we will not instruct you in the use of these tools, but rather ask your team to research, explore, learn, and present on one of the Web 2.0/Open Source tools/sites.

You will put your presentation together before the June portion of the summer institute begins. Your half hour presentations will be made to the entire group during the scheduled days we meet face to face in June.

Your presentations will be a half hour in length and include a “how to” & “what for” as well as highlighting the potential educational value.

Immediately after, you will also upload this to the public Resources Section at the VITA-Learn portal.

Working with your instructors, you will select one of the items below. We ask you to please to select something that represents new learning to all of your team members.

Web 2.0/Open Source Requirements

1. Wikis including options for Wiki sites
2. Social Networking in Education
3. Google Docs – Docs, Spreadsheets, Forms & Presentations
4. Google Earth, & Sky
5. Google SketchUp
6. Jing, CamStudio and other screen capture sites and applications
7. Social Bookmarking including del.icio.us, Furl and Spurl
8. Visual Organizers such as Gliffy, Mindomo, Bubbl.us and others
9. VoiceThread - a Web-based digital-storytelling application that allows users to share their stories through audio, images, videos or text.
10. Wordle & TagCloud are sites for generating “word clouds” from text that you provide whether that be a blog, blog feed, or any other web page
11. Your Choice (must be approved) – You may select a significant Web 2.0 tool/site or you may select several smaller utility sites like “Dropbox.” This must be approved in advance. See Ed for details.

PLEASE NOTE: There are so many, many options that we have only mentioned a few of the more standard ones here. The real key here is not to “play it safe” but to experiment with something new. Some Web 2.0 tools work great and others not so much. Feel free to try out different ones and report back even if they “aren’t so good.”

Past participants found some very creative ways to present their Web 2.0 tools. We are hoping that you can exceed the standard they set!! Creativity Counts!!

VITA-Learn Summer Institute

***Creating 21st Century Classrooms:
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Web 2.0 Tools

Web 2.0 Tool: _____

URL: _____

General Description/Purpose:

Instructions for Use:

Possible uses in Education:

VITA-Learn Summer Institute

Developing 21st Century Classrooms IV

Unit Expectations

There are several key components we will be looking for in your units. Included in these will be that it is truly project- or inquiry-based and that it continually addresses the ways you have differentiated instruction in content, process and product. We are looking for significant student-centered learning especially as it relates to purposeful, relevant and authentic work. Additionally, we will be looking for ways that you have designed the unit and lessons that require students to collaborate with others beyond the walls of your classroom and school.

Your team will develop ONE unit. The unit must have many cross-curricular connections (interdisciplinary). Although we expect technology to play a significant supporting role in this unit, it is the pedagogy in which we are most interested.

Your unit will be judged on the following:

- Rich content aligned with the Vermont grade expectations and appropriate to grade level(s).
- Creates an authentic 21st century student-centered learning environment
- Significant implementation of project and/or inquiry-based learning
- Effective use of Understanding by Design
- Purposeful design and use of Assessments (pre-assessments, formative and summative)
- Widespread implementation of Differentiated Instruction
- Significant collaborations with others beyond the walls of the classroom and school
- Effective Technology Integration – NETS-S with significant integration of Web 2.0 tools/sites.
- Integration and assessment of 21st Century Skills

Layout & Detail

Initially you will lay out your unit, assessment, lessons, and activities in a Word template that we will provide. Later, you will copy and paste this into the Learning Village or VITA-Learn Portal. (we will let you know which one and how to do this in the summer.) You are expected to lay out a series of lessons and activities. Please do NOT create lessons that last for one or two weeks at a time... break these apart.

Please pay attention to the following. We have found that people let this slip by and are frustrated when we ask them to do it after they have drafted their unit and lessons. Each lesson must have enough detail so that someone who has never taught this particular lesson would have adequate information to successfully implement it. Please list all resources and site them adequately.

The Unit Development Process & Timeline

May 25, 2011** - The participants will attend a workshop on *Understanding by Design* and begin to consider their Enduring Understanding and Essential Questions.

May 25 – June 26 - teachers will develop a draft of their Enduring Understanding and Essential questions. It will be very important the participants go no further with their unit at this time. *Do NOT begin to develop the unit. This can NOT start until after the June Dots workshops*

Read all of...

- Integrating Differentiated Instruction & Understanding by Design
- Reinventing Project-Based Learning
- Transformation & Technology: A New Way of Learning – Classroom Scenarios
- Revised Technology Grade Expectations

June 27th** – UBD – Review/sharing EU and EQs and begin work on KUDs

June 28th** – UBD Part 2 – Finalizing EU, EQs and KUDs

June 29th** – Summative Assessment

June 30th** – Differentiated Instruction

NOTE: When they leave this week participants should have...

- *Their EU, EQs and KUDs completed*
- *Their Summative should be completed or nearly completed.*
- *Make certain all their work is tied to the Standards & GEs or Common Core*

July 1 to July 14 - teachers will develop their unit and lesson plans. Participants will develop a Unit Overview and develop their specific lessons.

You must send a draft to the Instructor or Consultant via email by July 14th. This is not optional!

July 18** - Teachers will meet with the Instructor and Consultant to get feedback on their work. They will also be given a substantial amount of time to work on revisions to their unit and lessons based on feedback.

July 19** – Teachers work on Units. Optional meetings with Ed & Kathy

July 20th - July 31st - participants will finalize their units & lessons.

Ed & Kathy will be available via “FaceTime” during this period for consultation. Contact us via e-mail to set up an appointment.

July 31st – Final Unit uploaded to the designated location

August 1st ** – Final Presentations

** = In-person meetings

**Creating 21stCentury Classrooms IV:
Connecting the Dots**

Unit Design Template

Unit Title:

Creator:

Topic:

Grade level(s):

Content Areas:

Approximate Duration:

Enduring Understanding: (write a brief statement that describes the unit's enduring understanding.)

Essential Questions: (list several essential questions here)

Unit Overview: (write a succinct paragraph that describes your unit)

Learning Goals:

Vermont Standards & Grade Expectations Assessed:
(list standards and GEs/common core here that you plan to assess – remember please do not try to cover too many)

KUDs: (create a bulleted list under each of the following statements)

- **Students will know:**
(What key knowledge/skills will students acquire as a result of this unit?)
- **Students will understand:**
(What understandings will students have as a result of this Unit?)
- **Students will be able to:**
(What should students eventually be able to do as a result of this knowledge, skills and understandings?)

Pre-requisite Considerations

Culminating Summative Performance Task:

(Please add here a description of your culminating summative assessment. Prepare this as if you are introducing this assignment to your students for the first time. Therefore, you will likely need a handout that describes the project, sets expectations and deadlines, etc.)

(Scoring Rubric or Assessment Guide – Create the rubric or scoring guide that you will use to evaluate the students understanding of your big ideas, your essential questions and your KUDs examined during this unit.)

NOTE: As you develop your lessons and activities within them please be doubly aware that each one of these must tie directly to your enduring understanding and at least one of your essential question

**Creating 21st Century Classrooms:
Connecting the Dots IV**

Lesson Design Template

Lesson Title:

Name of Corresponding Unit:

Creator:

Grade level(s):

Recommended Duration:

Essential Question:

Specific Learning Goals for this lesson:

- Students will know:
- Students will understand:
- Students will be able to:

Lesson Overview:

Description & Sequence: (step by step detailed explanation for carrying out the lesson)

Pre-Assessment:

Formative Assessment(s):

(Lessons that follow should show a connection between the results of pre- and formative assessments. How is understanding being scaffolded?)

Summative Assessment: (This may not be appropriate here. However, there are times when the Summative has multiple pieces and occur throughout the various lessons. If that is the case, please list them here)

How will you **Differentiate Instruction** for various learners? (Consider content, process, and product)

Student-centered learning: (Address here how this lesson meets the criteria for SCL)

Inquiry-based learning: (Address here how this lesson meets the criteria for IBL)

Materials:

Resources:

(please be sure to list full URLs for web sites, full citations for books, readings, articles, etc.)

Vermont Standards & Grade Expectations Addressed:

21st Century Skills including Technology:

File Attachments: (List here)

Creating 21st Century Classrooms II: Connecting the Dots Assessment Design Template

Assessment Title:

Name of Corresponding Unit:

Content Area(s):

Creator:

Grade level(s):

Recommended Duration:

Vermont Standards & Grade Expectations Addressed:

Assessment Overview:

Description: Give a clear and detailed description of the assessment. Include - What does it look like in the classroom.

Differentiated Instruction: How does this assessment **Differentiate** for various learners?

Student-Centered Learning: How does this assessment address some of the key concepts in student-centered learning?

Inquiry-Based learning: How does this assessment address some of the key concepts in inquiry-based learning?

Materials:

Resources: (please be sure to list full URLs for web sites, full citations for books, readings, articles, etc.)

21st Century Skills including Technology: (Describe both how this assessment is assessing 21st century skills and how it utilizes 21st century tools.)

Links: Create links here to:

- The Rubric or scoring guide
- The Exemplar