**21st Century Technology Teams Unit/Project Plan**(Based upon ISTE & UbD models – Used with permission)

**NOTE: Completed Unit/Project Plan and related materials must be submitted electronically by 11/17/10.**

**NOTE2: SBSD teachers are encouraged to use Rubicon Atlas, but they must be sure they include all the items identified below.**

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| **Teachers’ Names: Steven Menz** |
| **Grade Level(s): 3-4** |
| **Content Area(s): Science / Social Studies** |
| **Unit/Project Title: Biomes of the World** |

**Stage 1: Desired Results**

**Essential Question(s)** – What essential question(s) are you addressing?

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| Essential Questions:  1.\*  **How can location determine a biome/geographical region?**  2.\*  **How does investigating biomes/geographical regions help us to understand how people (animals and plants) live/survive?** |

**Standards, GEs, and 21st Century Skills** – What do you want students to know and be able to do? You must have at least one of each of the following. (**Please** **include the descriptions for each standard, GE, and 21st Century Skill**)

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| **Content Standards:**  VT GE 3.10 Students perform effectively on teams that set and achieve goals, conduct investigations, solve problems, and create solutions  VT GE 5.15 Students design and create media products that successfully communicate. |
| **IT Standards:**  **VT GE 1.18** Students use computers, telecommunications and other tools of technology to research, to gather information and ideas, and to represent information and ideas accurately and appropriately.   |  | | --- | |  | |  | |
| **21st Century Skills**  **2: Communication and Collaboration**  **Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:**  a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.  d. contribute to project teams to produce original works or solve problems.  **3: Research and Information Fluency**  **Students apply digital tools to gather, evaluate, and use information. Students:**  b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. |

**Stage 2: Assessment Evidence and Assessment Tools**

**Assessment** **Evidence** – What will students do or produce to demonstrate their mastery of each standard, GE, or skill? (**Note:** All standards, GEs, and skills listed above must be addressed).

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| **Performance Task(s):**  Students will work collaboratively, in small groups to research one of the 6 major biomes of the world. They will gather information from books and internet sites and create a web page for their biome that includes some, or all of the following: pictures, videos, digital voice recording, links to other sites re. the studied biome. |
| **Other Evidence:** Each group will present their project to the class.  The student created web pages will be combined to create a web site entitled “Biomes of the World” which will be linked to our class School Fusion Page. |

**Assessment** **Tools** – How will you assess what students do or produce? How will students know if what they’ve done is “good enough”? (**Note:** All standards, GEs, and skills listed above must be addressed).

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| **Rubric:**   |  |  | | --- | --- | | |  | | --- | | **Web Site Design : Biomes**  Teacher Name: **Mr. Menz**    Student Name:     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | | CATEGORY | 4 | 3 | 2 | 1 | | **Cooperative Work**  (21st Cen.Skills 2a/d  VT GE 3.10) | Partners show respect for one another's ideas, divide the work fairly, and show a commitment to quality work and support for each other. | Partners show respect for one another's ideas and divide the work fairly. There is commitment by some members toward quality work and support of one another. | Partners show respect for one another's ideas and divide the work fairly. There is little evidence of a commitment toward quality work in the group. | Partners argue or are disrepectful of other's ideas and input. Criticism is not constructive nor is support offered. The work is mostly done by one or two people. | | **Content**  (VT GE 1.18) | The site has a well-stated clear purpose and theme that is carried out throughout the site. | The site has a clearly stated purpose and theme, but may have one or two elements that do not seem to be related to it. | The purpose and theme of the site is somewhat muddy or vague. | The site lacks a purpose and theme. | | **Links (content)**  (VT GE 5.15  21stCen Skills 3b) | All links point to high quality, up-to-date, credible sites. | Almost all links point to high quality, up-to-date, credible sites. | Most links point to high quality, up-to-date, credible sites. | Less than 3/4 of the links point to high quality, up-to-date, credible sites. | | **Graphics**  (VT GE 5.15) | Page includes at least one of all of the following; pictures, video, digital voice, text and links to relevant sites | Page includes at least one of three of the following; pictures, video, digital voice, text and links to relevant sites | Page includes at least one of two of the following; pictures, video, digital voice, text and links to relevant sites | Page includes one or none of the following; pictures, video, digital voice, text and links to relevant sites | | **Multi-Media**  (VT GE 1.18, 5.15) | Graphics are related to the theme/purpose of the site, are thoughtfully cropped, are of high quality and enhance reader interest or understanding. | Graphics are related to the theme/purpose of the site, are of good quality and enhance reader interest or understanding. | Graphics are related to the theme/purpose of the site, and are of good quality. | Graphics seem randomly chosen, are of low quality, OR distract the reader. | | **Copyright**  (VT GE 1.18) | Fair use guidelines are followed with clear, easy-to-locate and accurate citations for all borrowed material. No material is included from Web sites that state that permission is required unless permission has been obtained. | Fair use guidelines are followed with clear, easy-to-locate and accurate citations for almost all borrowed material. No material is included from Web sites that state that permission is required unless permission has been obtained. | Fair use guidelines are followed with clear, easy-to-locate and accurate citations for most borrowed material. No material is included from Web sites that state that permission is required unless permission has been obtained. | Borrowed materials are not properly documented OR material was borrowed without permission from a site that requires permission | |
| **Other Tools:** |

**Stage 3: Learning Plan**

**Overview** – This is a **short summary** of the lesson or unit including assignments or possible products.

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| Over a six to eight week period, students will work collaboratively, in small groups to research one of the 6 major biomes of the world. They will gather information from various media, including books and internet sites and create a web page for their biome that includes some, or all of the following: pictures, videos, digital voice recording, links to other sites re. their studied biome. Final web pages will be presented to the rest of the class using our class Smartboard and the final 6 pages will be incorporated into a class website which will be linked to my class homepage.. |

**Resources** – What resources will you use in your project (e.g., digital tools, web pages, print resources, etc.)?

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| Laptops  Smartboard  Digital Voice Recorder  <http://vcat.us/cesu/docs/K-4Resources/biomes.htm>  Google Earth  District Technology Coordinator  PBworks or School Fusion (to create webpages) |

**Preparation** – What student needs, interests, and prior learning provide a foundation for this lesson? How can you find out if students have this foundation? What difficulties might students have?

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| -Students should have some prior knowledge of computer basics. (I know my students have had access to laptops in previous years)  -The novelty of creating web pages will hopefully address student interest in the project. To further address student interests I will try to allow students to select their own biome to research.  -One problem that I foresee is that our network access is not as reliable as I would like and this may bring our research to a screeching halt on certain days. |

**Management** – What strategies will you use to manage the project (e.g., benchmarks for tracking student progress, plans for grouping students, a scheme for allocating and sharing technology, etc.)? How and where will your students work (e.g., classroom or lab, individually or in groups, etc.)?

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| * Students will be grouped across grade levels (2-4) based on Biome interest and/or teacher discretion * Each group of up to 3 students will have access to 1 laptop per group * Students will work within their groups in the classroom * Teacher(s) to facilitate / troubleshoot / monitor group progress and participation. * “3 before me” regarding tech questions |

**Timeline for Instruction and Activities** – List the learning activities you will use and provide a timeline that indicates what students must complete and by when.

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| Students will work on this project 4-5 times a week for six to eight weeks. Once the overview and the following lessons have been completed, students will be working at their own pace until the ending project date. Lessons will include, but are not limited to:   * **Day 1**   Project overview   1. What is a web page? 2. What is a web site? 3. Fair Use Guidelines 4. Final project requirements  * **Day 2**   How to access and utilize appropriate internet sites (I will provide the sites)  Importing links  Using citations correctly   * **Day 3 Begin Group Work**   Mini lesson - Adding a voice recording   * **Day 4 Continue Group Work**   Mini lesson - Adding text boxes   * **Day 5 Continue group Work**   Mini lesson – adding pictures   * **Days 6 – 18 Continued Group Work** * **Days 19 – 21 Group Presentations** * **Day 22 Teacher to create Website from group WebPages and post to class School Fusion page.** * **Day 23 Share Website with class** * **Day 24 Class shares Website with the school at whole school assembly** |

**Instructional Strategies –** Describe how you will use any of the strategies listed below in your unit/project. **NOTE:** You don’t have to use them all!

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| **Project-Based Learning:** Students will be asked to create a webpage regarding one of the 6 major biomes of the world. They will then be given the tools needed to research and achieve that goal. The activities will be authentic, relevant and involve collaboration that utilizes 21st Century Skills. |
| **Differentiated Instruction:** Because of the wide variety of media which can be used during this project, various strengths and learning styles are inherently addressed. |
| **Inquiry-Based Learning:** |
| **Constructivism:** |
| **Learning Centers:** |
| **Collaborative Groups:** Students will be grouped across grade levels to create a web page which demonstrates learned knowledge about their biome. |
| **Other:** |

**Closure and Reflection** – How will you wrap up the unit (e.g., a culminating activity)? How will students reflect upon their work?

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| Groups will share their biome webpages using the Smartboard in the classroom. The instructor will pull the group web pages into a final website on the 6 major biomes of the world. This website will be posted to the class School Fusion page. Students will be able to access this site from home to show their work to their families. Students will then share the final class project at our weekly assembly. |

Adapted from: National Educational Technology Standards for Students, Second Edition, © 2007, ISTE ® (International Society for Technology in