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Context-Based Learning

"The central feature of context-based learning environments is the use of realistic contexts as a starting point and anchor for learning" (Taconis, Brok & Pilot 2016).

There has been an increasing push recently for educators to approach teaching and learning from a context-based perspective in order to meet the diverse needs of classrooms. What this means is teachers must recognize themselves as facilitators of learning, creating a relevant and recognizable context for students to construct their own knowledge and understanding.

Another buzzword flying around educational circles these days, which serves as a template for context-based learning is 'problem-based learning.' Robert Delisle writes that PBL "provides a structure for discovery that helps students internalize learning and leads to greater comprehension" (1997). If the problem presented is recognizable to students, and allows them to make connections to their community, culture and past experiences, engagement increases, while they draw on new information to develop a solution. The

origins of this educational approach can be found in work such as John Dewey's assertions that "methods which are permanently successful in formal education . . . go back to the type of situation which causes reflection out of school in ordinary life. They give pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking, or the intentional noting of connections; learning naturally results" (1916).

In the 21st Century, education is not so concerned with the memorization of facts and formulas, in an age of easily and quickly accessible knowledge. It is much more valuable to be an effective team player who knows how to apply knowledge from a variety of disciplines to achieve something. The focus should be on the development of transferable skills and attributes to a variety of settings. Graduates of the future need to be self-directed, analytical, critical-thinkers and problem-solvers.
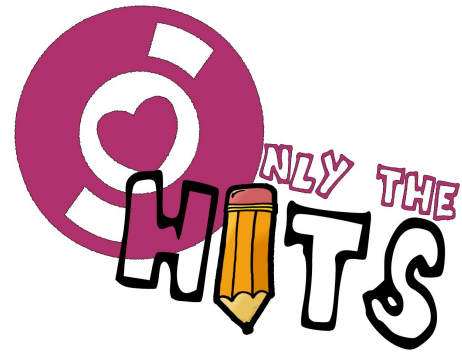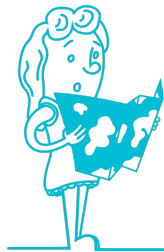

How To Get Started:

1. The teacher will develop a real-life problem (personal, local, global implications) for students to explore using subject-specific knowledge and outcomes.

2. Students will consider solving the problem using information they already possess.

3. Students will identify what knowledge is missing, which they will need to construct, in order to solve the problem.

4. Students will engage in self-directed study to obtain the missing knowledge.

5. Students will return to the problem and apply what they knew and learned in an attempt to resolve.

6. Students will reflect on their solution through peer and self assessment processes.

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REACT

The Center for Occupational Research and Development (CORD), based out of Texas, presents a contextual teaching and learning model they call 'REACT.' They argue that "curricula and instruction based on contextual learning should be structured to encourage five essential student engagement strategies: Relating, Experiencing, Applying, Cooperating, and Transferring"
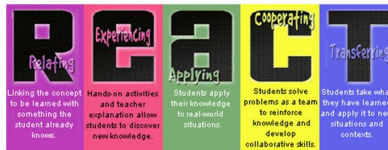
1. Relating: Learning in the context of one's life experiences or pre-existing knowledge.

2. Experiencing: Learning by doing, through exploration, discovery, and invention.

3. Applying: Learning by putting skills to use.

4. Cooperating: Learning through sharing, responding, and interacting with others.

5. Transferring: Using knowledge in a new context or novel situation.

EXAMPLE: Context-Based Learning in Social Studies 7

(Inspired by a lesson observed in Mr. Fehst's SS 7 class at RMSS, Slave Lake, AB, 2019.)

In the 1830s, a movement towards responsible government in British North America emerged. Democratic reformers believed a government that represented the people would be more effective and good than a government that represented the monarch, across the ocean.

The activity is designed for students to feel the frustrations of the people in North America, prior to the birth of 'responsible government,' who's elected assembly might often go unheard by the executive branch of government, who advised a governor that made the final decision.

1. REAL WORLD 21st CENTURY ISSUE:
Colonization of Mars will begin this month and some major decisions need to be made by the first settlers. Due to limited storage space, settlers must decide on which necessities of life will be brought with them, or developed, on their mission, from a provided list, and also how large of a population they want to bring, and how quickly they want to bring new settlers in after the initial arrival.

2. COOPERATIVE LEARNING LESSON:
a. Create Learning Groups - A government system is established to make these decisions in which the teacher will act as governor, a small executive branch will be selected by the governor to be advisors, and the remaining students will be divided into groups of elected representatives.

b. Group-work - Groups of elected representatives will review a list of options for Mars, and agree upon three must-haves for their settlement of the 'New World.' During this process they will draw on knowledge from various subject areas. It is recommended that they use a KWL chart to identify what they know and need to know in order to make the best decisions, and do some light, self-directed research if necessary. They will also decide on recommendations regarding population and future growth. The legislative branch is reviewing options, doing research, and discussing at this time too, while the teacher floats around the room throwing out discussion prompts if needed.

c. Presentations - A speaker from each group of elected representatives will present their recommendations to the executive branch, trying to sell their ideas.

d. Tally and Final Presentation - The executive branch will tally up the results of the recommendations from the elected representatives and present their final

remarks to the governor (teacher), based on the results and/or their own opinions.

e. Governor's Decision - The governor will make the final decision after all recommendations are heard, and will purposely choose and justify options not presented by the elected representatives.

3. REFLECTION:
Class discussion will naturally ensue about the unfairness of the process and lack of appreciation for the work and thoughtfulness of the representatives. This will be a perfect segue-way into a quick presentation by the teacher on democratic reform in British North America. Personal connections to the subject-material were already made through the context-based activity.

ADDITIONAL RESOURCES
Article - 'Problem-based Learning in Biology with 20 Case Examples' by Peter Ommundsen
http://capewest.ca/pbl.html

Article - 'Planning for Context-Based Teaching' (Teacher Magazine) by Dave Tout
https://www.teachermagazine.com.au/articles/planning-for-context-based-teaching

Article/**Resources** - 'Contextual Teaching and Learning Toolkit' by The Center For Occupational Research and Development
http://cordonline.net/CTLtoolkit/index.php

Samples - 'Contextual Learning - List of Projects' by Massachusetts Department of Elementary and Secondary Education
http://resources21.org/cl/projects.asp

Article - 'Contextual Teaching and Learning for Practitioners' by Clemente Hudson & Vesta Whisler
http://www.iiisci.org/journal/cv$/sci/pdfs/e668ps.pdf

Articles/**Resources**/**Samples** - PBL Works https://www.pblworks.org/

Video - 'Solving Real-World Problems: Bringing Authentic Context to Learning' by Edutopia & Two Rivers Public Charter School
https://www.youtube.com/watch?v=G3ILoJ3XMbA