



## Board/Authority Authorized Course Framework

<b>School District/Independent School Authority Name:</b> Langley	<b>School District/Independent School Authority Number (e.g. SD43, Authority #432):</b> SD35
<b>Developed by:</b> A. Clayton	<b>Date Developed:</b> November 2015
<b>School Name:</b> LFMSS	<b>Principal's Name:</b> A. Moore
<b>Superintendent Approval Date (for School Districts only):</b>	<b>Superintendent Signature (for School Districts only):</b>
<b>Board/Authority Approval Date:</b>	<b>Board/Authority Chair Signature:</b>
<b>Course Name:</b> Game Theory & Design Unplugged	<b>Grade Level of Course:</b> 11
<b>Number of Course Credits:</b> 4	<b>Number of Hours of Instruction:</b> 120 hours

**Board/Authority Prerequisite(s):**

N/A

**Special Training, Facilities or Equipment Required:**

Variety of strategy games including but not limited to: Monopoly (for comparison purposes only), Ticket to Ride, Stratego, Carcassonne, Bohnanza, Citadels, Family Business, Werewolf, Love Letters, Incan Gold, Scotland Yard, Forbidden Island, Pandemic, Settlers of Catan, Smallworld.

**Course Synopsis:**

This course has been designed to explore the principles and theories behind gaming. It provides a collaborative opportunity for gamers to participate in playing a variety of types of strategy or 'European' games. Students will demonstrate application and strategies as they learn, reflect, and connect various gaming mechanics and structure.

**Goals and Rationale:**

This course is designed to promote the value of game playing, role playing, and simulation activities as those that create meaningful, contextualized learning experiences. Learning and reflecting principles and mechanics of existing games will provide students with opportunities to learn new ways to approach information and creative texts while strengthening their cooperative skills.

**Goals:**

- Constructive social interactions are essential skills for life
- Learning involves exposure to new ideas and formats and reflecting and connecting on learning experiences
- Learning involves regularly applying and adjusting to new information and formats

**Aboriginal Worldviews and Perspectives:**

- Emphasis on Experiential Learning: From reading instructions for new games to applying learned strategies this course requires active involvement and implementation. The more students learn from their own actions the more successful they can become.
- Emphasis on relationships: The focus of the course is on participation over victory so students of varying ability can participate in their own way. Different social groupings provide students with a variety of leadership possibilities.
- Emphasis on story: Gaming is a form of storytelling, many of which provide opportunity to make connections to history, geography, sciences and math which reinforce these disciplinary skills.

**Community Partnerships:**

N/A

**BIG IDEAS**

Gaming includes a variety of communicative, critical and creative thinking skills.

Gaming provides opportunities to develop **cooperative social, and leaderships skills** in a semi-structured setting.

**Strategy gaming** develops skills including evaluating, planning, managing, and prioritizing.

Reviewing and interpreting existing games provides inspiration for improved and new games.

Interpreting information from a variety of formats can help make inferences and gather meaning.

**Learning Standards**

Curricular Competencies	Content
<p><i>Students are expected to do the following:</i></p> <ul style="list-style-type: none"> <li>• <b>Participation</b> <ul style="list-style-type: none"> <li>- Develop and demonstrate skills needed to understand how to play unknown games, organize, and participate in game play</li> <li>- Apply methods of reflecting and adjusting strategies based on activity and participants</li> <li>- Apply skills to new games and scenarios</li> <li>- Experiment with a variety of strategic planning to participate in gaming effectively</li> <li>- Plan ways to overcome potential barriers to participation successfully in gaming</li> <li>- Participate in <b>reciprocal relationships</b> throughout the gaming and production process</li> </ul> </li> <li>• <b>Reason and reflect</b> <ul style="list-style-type: none"> <li>- Analyze, interpret, and respond to games and game play using appropriate terminology</li> <li>- Develop an awareness of self and peers</li> <li>- Reflect on games and personal performance</li> <li>- Reflect on gaming experiences and how they relate to a specific theme, mechanic, and context</li> </ul> </li> <li>• <b>Connect and expand</b> <ul style="list-style-type: none"> <li>- Apply <b>gamification</b> to researched materials or prior knowledge</li> <li>- Develop games with an intended audience in mind</li> <li>- Establish a point of view for a chosen design opportunity</li> <li>- Identify potential users and intended application</li> <li>- Generate ideas and add to others' ideas to create games</li> <li>- Identify and apply sources of inspiration and information</li> <li>- Choose an appropriate theme, mechanic, and victory conditions for prototype</li> <li>- Assess ability to work effectively both as individuals and collaboratively while producing a prototype</li> </ul> </li> </ul>	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none"> <li>- Elements and game design: goals, challenges, puzzles, and conflict</li> <li>- Understand aspects of gaming mechanics and how they affect game play</li> <li>- Understand gaming techniques and tools: cards, boards, dice, spinners, and pieces and how they develop theme</li> </ul>

## Big Ideas – Elaborations

### Cooperative social and leaderships skills:

Cooperative groups have a defined common purpose. Participants can achieve success while facilitating the success of others through common goals, accountability, and achievement.

- consistently respecting and following the rules
- competing fairly (e.g., using talent and ability to play their best, following both the spirit and the letter of the rules, demonstrating self-officiating)
- demonstrating respect for their own and others' individual abilities
- demonstrating emotional self-control (e.g., being a gracious winner or loser)
- volunteering in class
- encouraging others
- helping set up or take down equipment
- mentoring others

### Strategy gaming:

Where players' decision-making skills have a high significance in determining the outcome of the game. Elements of Strategy games include:

- Players succeed (or lose) based on strategic decisions, not luck.
- Players have equal knowledge to play; no trivia.
- Play is based on multiple decisions a person could make on each turn with possible advantages and disadvantages each time.
- Players can plan strategies that will take multiple turns to complete fully.

## Curricular Competencies – Elaborations

- **Reciprocal relationships:** communicate with knowledge keepers for greater understanding of perspectives and history within the community, such as seniors, Elders, chiefs, First Nations tribal or band councils, and later career professionals.
- **Gamification** is the application of game-design elements and game principles in non-game contexts, employing game design elements to improve engagement, organization, flow, learning, and evaluation etc.

## Content – Elaborations

- **Strategies and techniques:** Strategies used will depend on purpose and context. These may include the use of gaming elements for a desired effect, including, but not limited to, skills such as blocking, bluffing, probability, deduction, offensive action, resource and/ or action optimization.
- **Game Design:** applying design and aesthetics to create a game for entertainment or for educational, exercise, or experimental purposes.
- **Gaming mechanics:** mechanics are the actions a player undertakes in order to play a game. These include, but are not limited to, area control & movement, card drafting & hand management, point to point movement, route/network building, secret unit deployment, set collection, and trading.
- **Theme:** the utilization of a particular subject or scenario world in which to attract and keep players in the right frame of mind to make better, more informed decisions because they can use existing knowledge about a subject to help them.

**Recommended Instructional Components:**

- Large-group and small-group participation
- Solo participation
- Direct instruction
- Reflective writing
- Creative writing
- Peer & Self-assessment

**Recommended Assessment Components:**

Ensure alignment with the [Principles of Quality Assessment](#)

- Feedback and assessment of participation; strategy development; idea development of final product
- Self-assessment of participation, strategy and final product
- Peer-assessment of participation and final product
- Criteria-based assessment: criteria and rubrics to determine the standards met and the level of performance attained.
- Teacher assessment of the collection of student work looking for a demonstration of strengths, areas of growth, and areas for further development

**Learning Resources:**

Variety of Strategy games including but not limited to:

Monopoly (for comparison purposes only), Ticket to Ride, Stratego, Carcassonne, Bohnanza, Citadels, Family Business, Werewolf, Love Letters, Incan Gold, Scotland Yard, Forbidden Island, Pandemic, Settlers of Catan, Smallworld.

**Additional Information:**

n/a