

# **Proposal For Moanalua Middle School Summer School Bridge Program**

**Bill Gates**, bridge enthusiast said: “Bridge offers the kind of mental acuity that is handy for everything you want to do with excellence. Bridge keeps your mind very, very, active.

**Warren Buffett**, another bridge enthusiast said “ It’s got to be the best intellectual exercise out there”. You’re seeing through new situations every ten minutes. In the stock market, you don’t base your decisions on what the market is doing, but on what you think is rational. Bridge is about weighing gain/loss ratios. You’re doing calculations all the time.” “The approach and strategies(of bridge and investments) are very similar in that you gather all the information you can and then keep adding to that base of information as things develop. You do whatever the probabilities indicate based on the knowledge that you have at that time, but you are always willing to modify your behavior or your approach as you get new information. In bridge, you behave in a way that gets the best from your partner. And in business, you behave in the way that gets the best from your manager and your employees.” “ I spend twelve hours a week – a little over 10% of my waking hours – playing the game. Now I am trying to figure out how to get by on a less sleep, in order to fit in a few more hands.

Researcher finds link between bridge and improved test scores in children in 5 subject areas; reading, language, math, science and social study. (please see attachment # 1).

Gate and Buffett put \$1 million together and ask Sharon Osberg, a 2 time World Champion bridge player to organize a bridge program for public school. The league organizes 4 tournaments per year, Halloween, Winter, Valentine and Easter and assists teachers with academic curriculum standards.

Sharon said public schools should be thrilled with this proposition, who knows, the next Buffett or Gates might be sitting in a classroom somewhere waiting for someone to teach them the meaning of ‘grand slam’. “Bridge should be popular. It’s an elegant game, full of strategy and tactics. It’s part science, part math, part logic, part reason. But huge component of bridge is also very human. This melding of the former with the latter is what sets bridge apart, not only from other card games, but also from board games like chess. While computers can now routinely beat all but a handful of chess grandmasters, they can’t come close to outplaying the world’s finest bridge players. Why is this? Because computers can understand math, but they can’t understand people – at least not yet. Bridge is a partnership game. Above all else, a successful bridge player must be a great partner. Trust, communication and patience are the essential attributes of winning at bridge. Once a strong partnership is formed, it provides a platform for individual

creativity, allowing players to inject their own personalities into the game. Take my bridge partner, for example. I play with Warren Buffett, the investor and founder of Berkshire Hathaway. No one would describe Warren as timid. Yet, when we first played bridge, we got trampled by our opponents because Warren deferred to me, and I was afraid to make mistakes. As we got to know each other, and as our partnership solidified, things changed. The Warren Buffett you know from business is now the same Warren Buffett I know at the bridge table. And as Warren would tell you, playing bridge is like running a business. It's about hunting, chasing, nuance, deception, reward, danger, cooperation and on a good day, victory.

### **A Case for Bridge in Schools**

Bridge is a game full of strategy and tactics. It's part science, part math, part logic, part reason. Bridge embodies cooperation, logic, problem-solving and has even been linked to higher test scores among children (please see attachment #1). Bridge is also partnership game. Trust, communication and patience are the essential attributes of winning at bridge.

### **Coded to State Standards**

Lessons are correlated to academic curriculum standards for all states and provinces. For the most part, the lessons address standards in Math, Language arts and Social Studies.

### **Meeting NCLB**

The Bridge lesson have also been designed to meet the character education traits as outlined in the government mandated public school requirement of No Child Left Behind-Title V. These Character Education Traits are listed as: Caring, Civic Virtue and Citizenship, Justice and Fairness, Respect, Responsibility, Trustworthiness and Giving.

### **Innovative Teaching Strategies**

School Bridge League curriculum is designed to use highly successful instructional strategies, including:

- 1) Co-operative Learning
- 2) Addressing Multiple Intelligences such as Visual/Spatial Intelligence, Interpersonal Intelligence, Bodily/Kinesthetic Intelligence, and Logical/Mathematical Intelligence

3) Service Learning

**Mathematical Applications**

Duplicate Bridge is a game of mathematics. The game is a vehicle for introducing concepts such as probability, percentage, data analysis, reasoning and proof, assessing value and applying this assessment to problem solving, and practicing inferential reasoning skills.

**Numbers and Operations:**

Students incorporate multiple evaluation methods to assess the value of their hand as well as their partner's and how to weigh these values.

**Data Analysis and Probability:**

Students confront situations in each hand (game) which require them to assess the probability of certain outcomes and make decisions accordingly.

**Algebra:**

Players reason from the communication skills learned in the bidding(auction), the value of their hand (a), plus the value of their partner's hand (b), must equal a specific total (c). Therefore, decisions are then made to achieve their goals.

**Problem Solving:**

Each hand(game) amounts to a set of problems that must be evaluated and re-evaluated in the span of a few minutes.

**Reasoning and Proof:**

Based upon communications skills learned during the teaching process, students reason that they can achieve a stated goal (contract), which they set out to prove. Flaws in the proof result in scoring adjustments.

**Communications:**

Students are taught the "language" of bridge which they use to communicate the value of their cards, formulate a goal (contract) and set out to prove.

## **Benefits of Bridge**

Here are just some of the ways bridge contributes to intellectual and social development.

Improved memory

Improved concentration

Improved ability to develop and modify plans

Development of judgment

Development of teamwork

Development of logic and analytical skills

Increased social skills

Lifetime enjoyment

Inclusion of all age, gender and ethnic groups and persons with physical limitations or disabilities.

## Curriculum Overview

### Purpose:

The learners understand the concepts of contract and social contract, and the important role that ‘rules’ play in enhancing the common good. They will begin to identify some of the characteristics required of those who desire to play the “game of life” in such a way as to promote the common good. The analogy of civil society as the ‘game of life’ (rules, trust, relationships) will be explored. Through learning and playing the card game “Bridge”, students will learn and practice life/social skills (problem solving, good character, interpersonal communication, collaboration and discipline), and study skills of memory, concentration and critical thinking. Core academic subject objectives Social Studies and Math will be addressed.

### Objectives:

The learners will:

Recognize the need for rules and regulations in games as well as in life.

Explore the concept of contracts and identify their importance in promoting the common good.

Identify characteristics that lend themselves to social contracts.

Identify ways to promote the common good by entering into social contracts.

Be introduced to the game of Bridge.

Understand the connection between Bridge and “bridging the gap”.

Begin to identify ways to promote the common good by entering into social contracts that revolve around the playing of the game of Bridge.

Define the vocabulary of Bridge.

Deal cards according to game playing etiquette.

Organize playing cards in a useable way.

Use mental arithmetic to count points for a hand.

Practice interpersonal communication and collaboration following game rules.

Estimate and predict a “winning” bid.

Decide on and carry out a service project to “Bridge the Gap” with Bridge.

Reflect on new leaning from the game of Bridge and from the service project.

**Experimental Component:**

The learners will use their newly acquired game playing skill in an academic service leaning project that will enhance the common good and serve to “bridge’ cultural, ethnic, racial, generational and/or gender gaps.

**Assessment:**

Learner participation in the group discussions and activities.

Completion of reflection activities.

Teacher observation of the ability to play Mini Bridge and/or Bridge.

**School/Home Connection:**

Students will discuss “contracts” with family members, and what written or unwritten rules that are part of those contracts.

Students will seek ideas from their families for service project involving Bridge.

**Lesson 1: Rules of the Game**

**Purpose:**

In this lesson the learners understand the concepts of contract and social contract and the important role that ‘rules’ play in enhancing the common good. They will begin to identify some of the characteristics requires of those who desire to play the “game of life” in such a way as to promote the common good. The analogy of civil society as the game of life (rules, trust, and relationships) will be explored.

**Duration:** TBD

**Objectives:**

The learners will:

Recognize the need for rules and regulations in games as well as in life.

Explore the concept of contracts and identify their importance in promoting the common good.

Identify characteristics that lend themselves to social contracts.

Identify ways to promote the common good by entering into social contracts.

**Materials;**

Display board/Chart Paper

**Assessment;**

Learners’ participation in group discussion and activities will serve as the assessment.

**School/Home Connection:**

Have the learners inquire of the adults in their home what contracts, they(the adults) might be involved in presently/historically and what were some of the expectations that were a part of that contract.

Have the learners discuss with their families some of the “rules” both written and “unwritten”, that are a part of their family’s “social contract” and how and why these “rules’ came to be. Discuss whether or not these “rules/regulations’ may change over time. Why? Or Why not?

**Lesson 2: Bridging the Gap with “Bridge”**

**Purpose:**

In this lesson the learners will come to understand the concepts of contract and social contract and the important role that “rules” play in enhancing the common good. They will begin to identify some of the characteristics required of those who desire to play the “game of life” in such a way as to promote the common good. The analogy of civil society as the game of life (rule, trust, relationships) will be explored. Through learning and playing the card game “Bridge”, students will learn and practice life/social skills (problem solving, good character, interpersonal communication, collaboration and discipline), and study skills of memory, concentration and critical thinking. Core academic subject objectives Social Studies and English language arts will be addressed. The learners will use their new found game playing skills in an academic service learning project that will enhance the common good and serve to “bridge” cultural, ethnic, racial generational and/or gender divides through play.

**Duration: TBD**

**Objective:**

The learner will:

be introduced to the game of bridge.

understand the connection between Bridge and ‘bridging the gap’.

begin to identify ways to promote the common good by entering into social contracts.

that revolve around the playing of the game of Bridge.

**Experimental Component:**

The learners will participate in a Service Learning Activity that features learning and playing of the game of Bridge in an effort to promote the common good through bridging cultural, ethnic, racial, age and/or gender gaps.

**Materials:**

Several decks of playing cards

Handout # 1:            Putting Play to Work for the Common Good

**Assessment:**

Learner participation in the group discussions and activities.

**School/Home Connection:**

Have the learners share with their families that they will be learning how to play Bridge and also how they will use this game as a way to promote the common good. Ask the students to discuss the ideas for service projects on Putting Play to Work for the common good. (Handout # 1)

**Lesson 3: Let the Games Begin!**

**Purpose:**

In this lesson the teacher will introduce the game of Mini Bridge and/or Bridge. Students will learn the etiquette involved in playing the game of Bridge, vocabulary that specifically pertains to the game of Bridge, how the cards are dealt at the table, and how players organize the cards in their hands as they get ready for bidding and play. They will practice the skills and rules of the game. Students will decide on a service project using MiniBridge or Bridge, carry out the project, and reflect on what they have learned through both experience with the game and with the project.

**Duration:**                    **Mini Bridge Lessons - 4 class periods.**  
                                      **Bridge Lessons – 12 class periods**  
                                      **Computer Lab - TBD**

**Objectives;**

The learners will:

Define the vocabulary of Bridge

Deal cards according to game playing etiquette.

Organize playing cards in a useable way.

Use mental arithmetic to count points for a hand

Play Mini Bridge

Practice interpersonal communication and collaboration following game rules.

Estimate and predict a “Winning” Bid.

Decide on and carry out a service project to Bridge the Gap with “Bridge”

Reflect on new learning from the game of Bridge and from the service project.

**Materials;**

A deck of cards for each student

Handout # 1, 3, 4, 6 for Mini Bridge

Handout # 7, 9, 10, 11 for Bridge