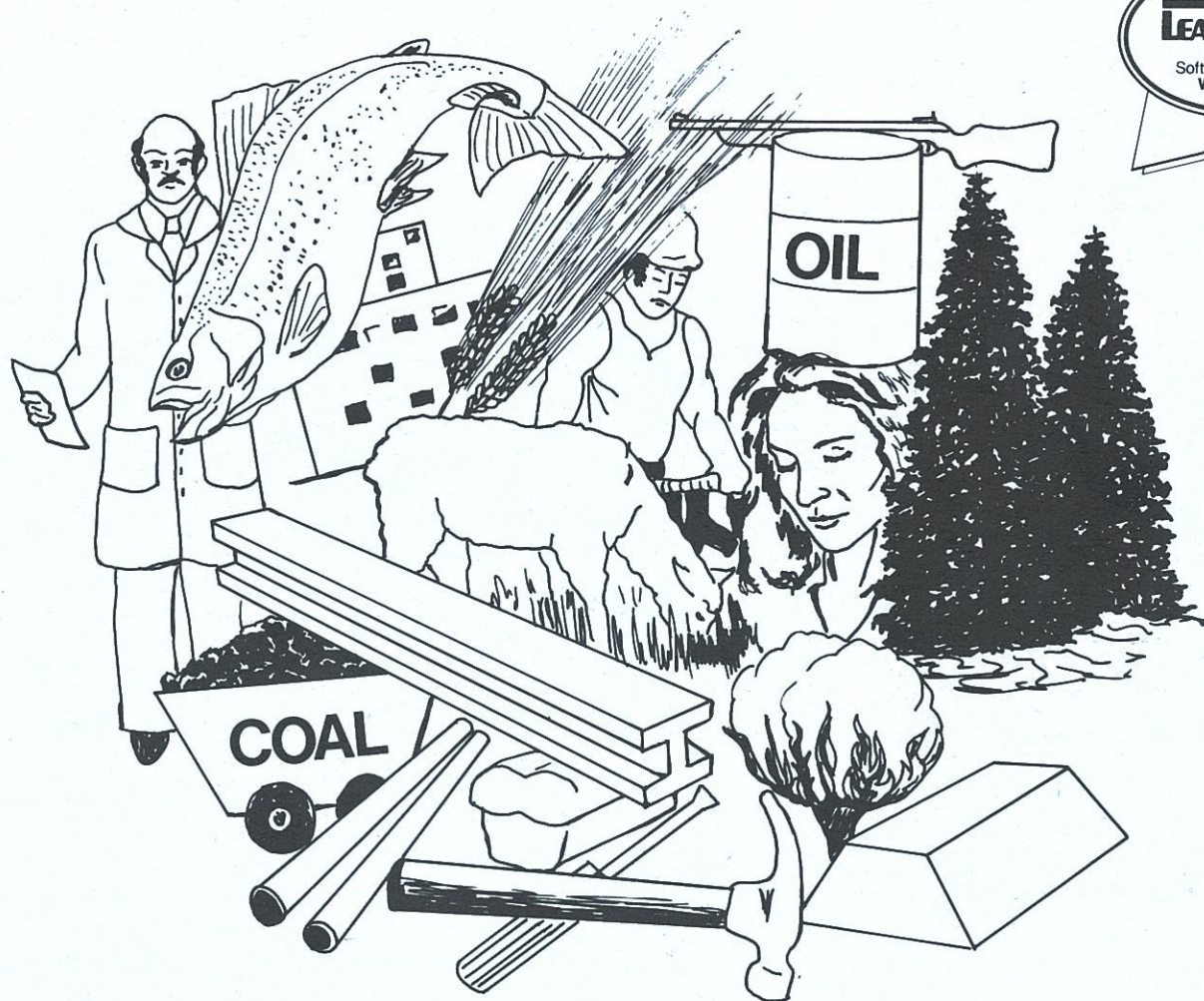


# SIMPOLICON

## SIMULATION OF POLITICAL AND ECONOMIC DEVELOPMENT



- FOR SOCIAL STUDIES
  - AMERICAN HISTORY
  - CIVICS
  - ECONOMICS
  - WORLD AFFAIRS
  - WORLD HISTORY
- CLASSROOM TESTED
- TEACHER DEVELOPED OVER 10 YEARS
- 9th GRADE TO COLLEGE
- USED IN THE U.S. & BRITAIN
- HIGHLY FLEXIBLE
- CONSTANTLY INTERACTIVE
- CONCEPTUALLY ACCURATE
- OPEN-ENDED SCENARIOS
- BASED ON ACTUAL INTERNATIONAL REALITIES
- SELF-PACED OPTION
- COMPLETE TEACHING FRAMEWORK & PROGRAM COMMENTS — PRACTICE SCENARIOS, REPRODUCIBLE STUDENT MATERIALS
- EMPHASIZES IMPORTANT CRITICAL THINKING AND PROBLEM SOLVING SKILLS & VALUES CLARIFICATION
- TEACHES THE TERMINOLOGY, COMPONENTS, & PROCESS OF SOCIAL/POLITICAL/ECONOMIC DEVELOPMENT



DESCRIPTION

SIMPOLICON is a realistic portrayal of the complex process and problems of national economic development.

SIMPOLICON players are individuals within a group within a country. The simulation starts with each country being given a limited amount of productive resources such as various types of land and mineral deposits, unskilled labor, and handtools.

The students are their country's leading economic-political experts, and they must make decisions on how best to use these basic resources. Their goal is to create and maintain a stable, secure country with a well-balanced economy in order to achieve personal success, group success, and country success.

Their decisions will determine production from agricultural land and mineral deposits; the education, health, and happiness of their people; the creation of machines, equipment, and other capital goods; and the military security of their country as a whole.

Their challenge is to provide for their country's unlimited economic wants easily and efficiently through advanced economic production. At the same time, however, they must limit pollution and be prepared for disasters and military conflicts.

AREAS OF LEARNING

ATTITUDES: In SIMPOLICON, students may experience a range of attitudes:

- BLINDNESS TO INSIGHT
- CALLOUSNESS TO EMPATHY
- COMPETITION TO COOPERATION
- DISCOURAGEMENT TO EXCITEMENT
- ETHNOCENTRICISM TO UNIVERSALISM
- FRUSTRATION TO FULFILLMENT
- SELFISHNESS TO SELFLESSNESS

SKILLS: SIMPOLICON puts a premium on the following critical thinking and problem solving skills:

- SETTING GOALS
- INTERPRETING AND USING DATA
- WEIGHING ALTERNATIVES
- REACHING CONSENSUS
- MAKING DECISIONS
- ACCEPTING CONSEQUENCES
- ADAPTING TO CHANGED CIRCUMSTANCES

CONCEPTS: SIMPOLICON develops some or all of the following concepts depending on student ability, teacher objectives, and mode of play/options used.

ECONOMIC CONCEPTS

- ABSOLUTE ADVANTAGE
- ACQUIRED ADVANTAGE
- ALLOCATION
- BALANCE OF TRADE
- BARTER
- BILATERAL TRADE
- BIRTH RATE
- CAPITAL
- COMPARATIVE ADVANTAGE
- CONSUMER GOOD
- DEATH RATE
- DEPRECIATION
- DIVISION OF LABOR
- ECONOMIC GROWTH
- ENTREPRENEURSHIP
- FACTORS OF PRODUCTION
- GNP/NNP
- LABOR
- LAND
- NATIONAL WEALTH
- OPPORTUNITY COST
- PRODUCER GOOD
- SCARCITY
- SOCIAL OVERHEAD CAPITAL

POLITICAL CONCEPTS

- CONFLICT MANAGEMENT
- CONSENSUS
- DECISION-MAKING PROCESS
- MAJORITY/MINORITY
- MILITARISM
- NATIONALISM
- PLURALISM
- POWER DISTRIBUTION
- POLITICAL SPECTRUM

SOCIAL CONCEPTS

- ACHIEVED STATUS
- ASCRIBED STATUS
- ELITE
- NORMS
- ROLES
- SANCTIONS
- SOCIAL CLASS
- SOCIAL MOBILITY
- STRATIFICATION
- VALUES

PLAYING OPTIONS

ALLOCATION OF RESOURCES

Resources may be randomly allocated or preset by the teacher to reflect specific social-political-economic situations.

DISASTERS/MILITARY PROBLEMS/FORTUITOUS CIRCUMSTANCES

Each may be independently set as to the first "year" of its occurrence and as to the probability it will occur once that year is reached.

POPULATION

Population may be considered static ("deaths" are tabulated but not subtracted from the working population for the next year, and "new births" do not occur) or dynamic ("deaths" are subtracted and "new births" added to the population and population control may be used).

INTERNATIONAL TRADE

Trade for individualized play (one player/country) is handled by computer generated trade prices; small or large group multiple country trade is conducted by the students themselves at trade "sessions" or on the computer.

GOALS

Twelve different goals may each be weighted independently to reflect "cultural values" (High GNP, Conservation of Resources, Pollution Level, Average Education Level, Number of Deaths, Consumer Wealth, and the importance of each of the following six interest groups — agriculture, business, consumer protection, education, health and military).

MODES OF PLAY

INDIVIDUAL AND PAIRS

Students use the SIMPOLICON software program as a stand-alone individualized learning tool for play and replay by varying the many starting parameters. Excellent as an individual extra-credit assignment or as the basis of a research assignment relating to the problems of political and economic development.

NEEDS: One computer per student or pair of students.

TIME: 5 to 10 hours, plus research or discussion time.

SMALL GROUPS

Four to eight students comprise one country, with four to five "countries" per classroom as a simulated "world." Different students in the group are made responsible for the six different interest groups, and therefore groups must deal with internal political relationships as well as foreign economic-political policy. International trade may take place among the groups during the class period.

NEEDS: One computer per classroom to record the production transactions of the groups.

TIME: 10 class hours, including debriefing discussions.

LARGE GROUPS

A class of students may become one or two countries, with groups of students in each "country" representing six interest groups. Multiple classes would thus become the "world" and international trade among countries would take place at mutually convenient times or by using the computer trade board.

NEEDS: One computer per classroom.

TIME: 10 to 20 hours, including introduction and periodic debriefings.



# SIMPOLICON: Simulation of Political AND Economic Development

## MENU STRUCTURE

### MAIN MENU

INSTRUCTIONS  
PLAY  
STATUS REPORTS

### INSTRUCTIONS MENU

OVERVIEW OF SIMPOLICON  
EXAMPLES OF PLAY  
EXPLANATION OF GOALS  
SETTING OF RESOURCES/PARAMETERS  
ALLOCATION OF RESOURCES  
NUMBER OF TRANSACTIONS  
POSSIBILITY OF +/- EVENTS (YR. BEGINNING & PROBABILITY)  
DISASTERS  
MILITARY PROBLEMS  
FORTUITOUS CIRCUMSTANCES  
WEIGHTING OF GOALS  
MINIMIZE DEATHS (FOOD/MEDICAL CARE)  
EDUCATE PEOPLE TO SKILLED OR HIGHER  
PROVIDE CONSUMER COMFORTS  
ACHIEVE HIGH GNP/CAPITA  
REACH INTEREST GROUP OBJECTIVES  
AGRICULTURE  
BUSINESS  
CONSUMER PROTECTION  
EDUCATION  
HEALTH  
MILITARY  
PRESERVE RESOURCES  
LIMIT POLLUTION  
USE OF POPULATION/TRADE OPTIONS  
STATIC/DYNAMIC POPULATION  
SINGLE COUNTRY/MULTIPLE COUNTRY PLAY

### PLAY MENU

SEE PRODUCTS LIST  
BEGIN PRODUCTION  
INITIATE TRADE  
CONTROL POPULATION  
(ALSO NON-MENU ROUTINES DURING PLAY:  
DISASTER, MILITARY PROBLEM, FORTUITOUS CIRCUMSTANCE ROUTINE  
END OF YEAR ROUTINE FOR FEEDING POPULATION  
WHO DIES ROUTINE — PROPORTIONATE, RANDOM, OR DISPROPORTIONATE)

### STATUS REPORTS MENU

BASIC RESOURCE STATUS  
PRODUCTION STATUS  
GNP & NNP  
NATIONAL WEALTH  
QUALITY OF LIFE  
INTEREST GROUP STATUS  
POPULATION/LABOR STATUS  
KEY DATA BY YEAR  
EVALUATION & SCORE

COLUMN 1: CURRENT AMOUNT  
COLUMN 2: PERCENT CHANGE THIS YEAR  
COLUMN 3: YEARS REMAINING AT THIS RATE

|                 |      |     |          |
|-----------------|------|-----|----------|
| BAUXITE DEPOSIT | 393  | -34 | 14       |
| COAL DEPOSIT    | 61   | -45 | 6        |
| COPPER DEPOSIT  | 231  | 0   | INFINITE |
| COTTON LAND     | 0    | 0   | INFINITE |
| FOREST LAND     | 1873 | -6  | 121      |

GOLD DEPOSIT  
GRAZING LAND  
IRON DEPOSIT  
PETROLEUM DEPOSIT  
RICE LAND  
RIPARIAN LAND  
WHEAT LAND

|                     |      |      |      |
|---------------------|------|------|------|
| AGRICULTURAL EQUIP. | 4    | 20   | 30   |
| ALUMINUM            | 0    | 0    | 0    |
| BAUXITE             | 4300 | 4300 | 4300 |
| BEAUTIFICATION LAND | 1    | 1    | 1    |
| BREAD               | 650  | 650  | 650  |
| CLINIC              | 3    | 30   | 60   |
| CLOTH               | 40   | 40   | 40   |
| COAL                | 3015 | 3015 | 3015 |
| C'PLETE COMM.SYSTEM | 0    | 0    | 0    |
| CONSERVATION LAND   | 9    | 9    | 9    |
| CONSTRUCTION EQUIP. | 9    | 40   | 40   |
| COPPER              | 900  | 900  | 900  |
| COTTON              | 0    | 0    | 0    |
| CULTURAL FACILITY   | 1    | 1    | 1    |
| DISPENSARY          |      |      |      |
| DOCTOR              |      |      |      |
| DURABLE COI         |      |      |      |
| ECOLOGIST           |      |      |      |
| ENGINEER            |      |      |      |
| F'T'LIZER/I         |      |      |      |
| FISH                |      |      |      |

### GROSS NATIONAL PRODUCT

CURRENT GNP: 62850  
DEPRECIATION: 1100  
CURRENT NNP: 61750

### DEFINITIONS:

GNP IS THE VALUE OF ALL FINAL GOODS PRODUCED OR SERVICES PERFORMED DURING THE YEAR. 'VALUE' IS SIMPOLICON'S ESTIMATED RELATIVE DIFFICULTY OF PRODUCTION. 'FINAL' MEANS THE NET GAIN OF A PARTICULAR PRODUCT OR SERVICE DURING THE YEAR.

DEPRECIATION IS THE USE/CONSUMPTION OF PREVIOUSLY MADE PRODUCTS TO PRODUCE THIS YEAR'S GNP.

NNP ('NET GAIN') IS GNP MINUS DEPRECIATION.

LAST YEAR'S GNP: 53830  
THIS YEAR'S GNP: 62850  
PERCENT INCREASE: 17%

Resources are representative  
e.g., forest land is any building material land.  
e.g., cotton land could be cocoa or banana land.  
Students might consider the mal-distribution of world resources and difficulties of one-crop economies. Resources may be reset at any time to replay the exact same distribution or to establish a new distribution.

Sixty-three products made from 200 different interrelated production functions. What products should be made and how should they be made (labor-intensive? land-intensive?) Methods of production will change as the simulated countries develop.

Should national success be measured by GNP? GNP counts everything that is made, good or bad. What other ways might there be of measuring national success? Does GNP always have to grow?

What is the impact of one nation's wealth on other nations? Should



Scores can establish baselines for comparing development strategies.

### SCORE

SCORE FROM WEIGHTED GOALS: 86  
X DIFFICULTY STARTING PARAMETERS: 4.8  
-----  
FINAL SCORE: 413

NOTE: DIFFICULTY OF STARTING PARAMETERS IS BASED ON CURRENT YEAR, TRANSACTIONS ALLOWED PER YEAR, YEARS PLANNED TO PLAY, AND FIRST YEAR AND PROBABILITY OF DISASTERS, MILITARY PROBLEMS, AND FORTUITOUS CIRCUMSTANCES.

DIFFICULTY RANGE 1 (EASY) TO 10 (HARD).

| YR | GNP   | POPULATION | GNP/CAPITA | LAND/DEP. | POLLUTION |
|----|-------|------------|------------|-----------|-----------|
| 0  | 0     | 31         | 0          | 8900      | 0         |
| 1  | 10500 | 31         | 339        | 8524      | 0         |
| 2  | 17406 | 31         | 561        | 8003      | 282       |
| 3  | 21564 | 31         | 696        | 7495      | 215       |
| 4  | 25125 | 33         |            |           |           |
| 5  | 25985 | 33         |            |           |           |

What are the interrelationships among the major components of a nation's economy? How does the change in one component affect the others? Students may graph these components.

What is an optimum population? What impact does population growth have on a country and on the world. Does the population of certain countries have a greater impact on the world than the population of other countries, especially in terms of resource consumption?

### POPULATION STATISTICS

COLUMN 1: NUMBER OF PEOPLE  
COLUMN 2: PERCENT OF TOTAL POPULATION  
COLUMN 3: USES FOR COMING YEAR  
COLUMN 4: TOTAL USES REMAINING

|                     |    |    |    |
|---------------------|----|----|----|
| DEPENDENTS          | 4  | 9  | 0  |
| DOCTOR              | 3  | 7  | 45 |
| ECOLOGIST           | 2  | 4  | 10 |
| ENGINEER            | 4  | 9  | 20 |
| JR.MILITARY OFFICER | 4  | 9  | 12 |
| MANAGEMENT LEVEL 1  | 0  | 0  | 0  |
| MANAGEMENT LEVEL 2  | 0  | 0  | 0  |
| MANAGEMENT LEVEL 3  | 0  | 0  | 0  |
| MANAGEMENT LEVEL 4  | 4  | 9  | 20 |
| PHILANTHROPIST      | 2  | 4  | 10 |
| SEMI-SKILLED LABOR  | 2  | 4  | 4  |
| SR.MILITARY OFFICER | 0  | 0  | 0  |
| SKILLED LABOR       | 3  | 7  | 9  |
| SOLDIER             | 4  | 9  | 8  |
| TEACHER             | 1  | 2  | 15 |
| UNSKILLED LABOR     | 12 | 27 | 24 |

PERCENT INCREASE: 174

### CALCULATING NATIONAL WEALTH

NATIONAL WEALTH: 188781

NATIONAL WEALTH IS THE VALUE OF ALL SIMPOLICON OUTPUTS EXISTING IN YOUR COUNTRY AT THE PRESENT TIME. 'VALUE' IS BASED ON THE ESTIMATED RELATIVE DIFFICULTY OF PRODUCTION.

What is the impact of one nation's wealth on other nations? Should foreign aid be given, and if so should strings be attached?

### QUALITY OF LIFE

|                               |      |
|-------------------------------|------|
| HUMAN ENVIRONMENT             |      |
| TOTAL DEATHS TO DATE:         | 26   |
| CURRENT POPULATION:           | 45   |
| DEPENDENT POPULATION:         | 4    |
| ADULT POPULATION:             | 41   |
| FERTILE:                      | 36   |
| NON-REPRODUCTIVE:             | 5    |
| CULTURAL ENVIRONMENT          |      |
| DISPENSARIES:                 | 0    |
| CLINICS:                      | 3    |
| HOSPITALS:                    | 0    |
| PRIMARY SCHOOLS:              | 1    |
| SECONDARY SCHOOLS:            | 4    |
| UNIVERSITIES:                 | 1    |
| CULTURAL FACILITIES:          | 1    |
| PHYSICAL ENVIRONMENT          |      |
| BEAUTIFICATION OF LAND UNITS: | 1    |
| CONSERVATION OF LAND UNITS:   | 9    |
| POLLUTION UNITS:              | 2771 |

How should a nation's quality of life be measured? As economic output grows so does pollution. How does one measure the impact of population and consumption on the environment? How should a nation balance the need for jobs and production with the need for environmental quality?

### CONSUMER

|                           |    |
|---------------------------|----|
| CULTURAL PHILANTH         |    |
| MAJOR CO                  |    |
| DURABLE                   |    |
| NON-DURABLE CONSUMER GOOD | 25 |

### CONSUMER PROTECTION GOALS COMPLETED

#### EDUCATION:

|                  |   |
|------------------|---|
| TEACHER          | 1 |
| UNIVERSITY       | 1 |
| SECONDARY SCHOOL | 4 |
| PRIMARY SCHOOL   | 1 |

### EDUCATION GOALS COMPLETED

#### HEALTH:

|            |   |
|------------|---|
| HOSPITAL   | 0 |
| DOCTOR     | 3 |
| CLINIC     | 3 |
| DISPENSARY | 0 |

#### MILITARY:

|                         |    |
|-------------------------|----|
| SENIOR MILITARY OFFICER | 0  |
| HEAVY WEAPON            | 0  |
| MEDIUM WEAPON           | 3  |
| LIGHT WEAPON            | 22 |

How does a nation resolve the competing claims on its resources by special interest groups?

Which interest groups have priority? Do these priorities change over time, and if so why and how?