Chapter 50
Stalin's Dilemma:
Design, Development, and Employment of a College Level Historical Computer Game

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ABSTRACT

Stalin's Dilemma is an educational game that simulates the industrialization of the Soviet Union during the three Five Year Plans between 1928 and 1942 (Bever, 2000). The goal of the game is to reach or exceed the historical levels of industrial capacity, military effectiveness, and political stability in order to prepare the country to repel an attack by Nazi Germany, but with less human cost than was inflicted by Josef Stalin. This chapter describes the game and discusses its design, development, and use in various educational settings and structures. Its goal is to convey insights and lessons that can be applied to future development and employment of other instructional simulation games. The primary conclusions are the need to support a complex design with extensive player aids and to harness students' competitiveness and ambition by directly connecting performance in the game to performance in the course.

INTRODUCTION

Sophisticated historical strategy games originated in the 1960s, when they were made of paper and cardboard and played by hobbyists who dedicated hours to learning their detailed rules and then spent entire days engaged in recreations of epic battles, campaigns, and even entire wars. The advent of the personal computer around 1980 ushered in a new era for these games, for the machine could memorize and enforce the rules, simplifying play while making possible new levels of complexity in design and of detail in the data. At the same time, the nature and scale of historical activity

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simulated in these games broadened as well, as purely military games gave birth to simulations of exploration, espionage, economic development, politics, and the rise and fall of civilizations. The original historical strategy games had the ability to put hobbyists in the shoes of historical generals, confronted by the original situations, opportunities, and constraints they faced, with the goal of besting both their opponent and the original commander. Computerized strategy games have the ability to put ordinary students in the shoes of a wide range of historical actors, confronted by the original situations, opportunities, and constraints they faced, with the goal of trying out options and learning from their mistakes not just to "win" the game, but in the process to learn about the historical circumstances – the situation and its opportunities and constraints – modeled by the design.

Stalin's Dilemma is an historical computer game specifically created to be used as part of college-level history courses. Created with the support of an American National Science Foundation grant to promote quantitative reasoning, it puts the student in the position of leader of the Soviet Union between 1928 and 1941, responsible to devise a series of three Five Year Plans that must prepare the Soviet Union to resist the anticipated onslaught of Nazi Germany. More specifically, students have to allocate labor, food, energy, raw materials, and factory resources to multiply industrial capacity, enhance military effectiveness, and maintain social stability, while minimizing deaths incurred in the process. The stakes are high, for if economic planning goes array, not only will millions die from starvation, civil disorder, and repression, but also the country will be unprepared to resist the Nazis, who are ready, by their own planners' estimates, to kill 30 Million Russians in order to secure the "Lebensraum" needed for their "Thousand Year Reich." (Wright, 1968) If the student plans well, though, the country will be prepared at only a fraction of the human cost inflicted by Stalin to defeat the Nazi invaders.

This chapter will discuss the design and development of the game and its employment in a different ways in a variety of college classes. Briefly, the game was designed with four goals in mind: 1) to promote quantitative reasoning; 2) to foster students' understanding of the process of industrialization in general; 3) to foster students' understanding of modern Russian history in particular; and 4) to create a platform for discussion of the stark moral dilemmas confronted by world leaders in the mid-twentieth century that are otherwise almost incomprehensible to students today. It was programmed in Visual Basic with a single main, spreadsheet-like game screen with numerous aids like a tutorial, hints, and documentation built in to help students understand how and why to shift resources between major economic sectors until they are ready to implement their plan. They then see a series of screens detailing the results of their plan, illustrated by photographs from the Soviet Union during the period of the actual five year plans. The game has been used in courses ranging from introductory surveys through specialized upper division courses as a classroom exercise, as a homework assignment, and in mixed ways, and with ancillary student activities including worksheets, essays, and competitions to achieve the highest score. The chapter will conclude with a discussion of ideas for enhancements in the future.

BACKGROUND

The creator of the game and author of this chapter is now a Professor of History at the State University of New York College at Old Westbury, but he previously worked as a computer strategy game developer on the staff of or as a freelance contractor with MicroProse Software; Britannica Software; Strategic Simulations, Inc. (SSI); Rainbird Software; and Grolier, Inc. He has taught at community colleges, other four-year colleges, and universities, and has employed both commercial and self-designed board, role-playing,