



LEARNING, EDUCATION & GAMES

100 GAMES TO USE IN THE
CLASSROOM & BEYOND

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100 Games to Use in the Classroom & Beyond

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RAILROAD TYCOON II

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Game: *Railroad Tycoon II*, a release of the Railroad Tycoon Series
Developer: PopTop Software. The designer of the game and founder of the company is Phil Steinmeyer.
Year: 1998
Platform(s): PC and video game console
Number of players: Single and Multi-player (up to 15 players)
Genre: Simulation
Type of the game: Computer/console digital game
Curricular connections: Social and Emotional Learning (SEL); management; business strategy.
Possible skills taught: Creativity; collaboration; decision making; strategic thinking; basics of economy
Audience: 10+ (middle, high school, and college students)
Length of time: At least one hour
Where to play: Business administration and economy classes
Cost: \$29.99 on Amazon
URL: https://en.wikipedia.org/wiki/Railroad_Tycoon_II

SUMMARY

Railroad Tycoon II is a Commercial-Off-The-Shelf (COTS) game that offers single-player and multi-player modes. The game franchise has five versions; the original *Railroad Tycoon* (1990), *Railroad Tycoon Deluxe* (1993), *Railroad Tycoon II* (1998), *Railroad Tycoon 3* (2003), and *Sid Meier's Railroads!* (2006). The game is a railway business simulation in which players act as the company's chair and need to build railway companies. The main goal of the game is to make profit as an investor and complete a variety of objectives while being challenged by some random events such as train faults, robberies, economic swings, and other predetermined events related to the scenario. To do this, players have to invest money to new railways and locomotives to make enough profit and compete with other rivals that runs different companies in the same map. To make profit, players are expected to build up cargo stations near various industries such as canneries, steel mills, automobile plants, and textile mills. Players have to practice management skills during the game such as delivering cargo from a station to another. Players can start the adapted game with a scenario about Turkish history (e.g., the players

are supposed to help construction of new Turkey after Turkish War of Independence culminated by Mustafa Kemal Atatürk) and a map of Turkey.

HOW TO USE THE GAME

Railroad Tycoon II can be used in a variety of ways, with different populations. For instance, the game was used for training of railway staff, who are mostly middle-aged, in one of the biggest railway companies in Turkey. In the mentioned railway company, there are 24 teachers in three different training centers and about 15,000 students, who are company's staff. As all the training activities are classroom-based, lecturing only would be boring and consequently ineffective to reach training objectives such as enriching staff's attitude and motivation toward taking the training courses. Therefore, we (authors of this chapter) decided to use the *Railroad Tycoon II* to help make connections between abstract concepts and real-world examples (Panoutsopoulos & Sampson, 2012).

We first analyzed *Railroad Tycoon II* regarding cultural features, such as language, religious symbols, and history. Regarding the use of other versions of *Railroad Tycoon*, newer versions of the game such as *Railroad Tycoon 3* and *Sid Meier's Railroads!* could also have been used for the same purpose. The latter versions are better in graphic quality and may motivate the players more. Nevertheless, their prices were high and they had culturally incompatible game background structures such as a church. In addition to this, *Railroad Tycoon II* has easy to edit scenarios and maps for authentic contexts such as workplaces and different cultures. After the analysis, we translated some critical parts of the game into Turkish and selected a map of Turkey for gameplay. In addition, we created a specific scenario about advancing newly founded Turkish Republic right after the war of independence.

During implementation of the game in a classroom, the participants used infinite money password to speed up the game process. Playing the game took about 45 minutes in a computer lab in the company's training department. A photo taken during playing the game is presented in Figure 1. To play the game, one teacher first gave some basic orientation about the game and how to interact with it for about 10 minutes. After that, participants were left free to play the game. During this playing period, we assisted the participants by making them understand the basics of gameplay. For example, we helped participants who encountered problems while establishing trade routes between train stations in cities.

Regarding results, it was observed that the gaming practice has activated some positive emotions of the participants such as enjoyment, curiosity, and astonishment. During the game activity, we observed that all of the participants were excited when they saw the Turkish map and were enthusiastic to build up new railroads from their birthplaces to other Turkish cities on the map. During the implementation period, the participants were highly willing to help each other to deal with some gameplay elements such as building up railroads and rail stations in different Turkish cities. Aligning with company's objectives, we recognized a remarkable increase in participants' motivation. Nevertheless, our participants were middle-aged adults and the context of implementation was in-service training, so best practices for using the game in formal educational settings might differ in contexts such as K-12 and higher education. For instance, students studying railway systems departments at vocational schools could learn how to run railway management by playing the game. The game could also be used to introduce some transportation principles such as how students could build up the shortest railway among train stations to reduce cargo expenses. In addition, this game

can especially be used in introductory business administration and economy classes. In K-12 context, students are more fluent in using technology and playing computer games because of being digital native, so they might need relatively shorter orientation in the beginning and less guidance during gameplay.



Figure 1. The playing context for the game.

TIPS AND BEST PRACTICES

1. Teachers should keep the game orientation long to minimize the individual differences that exist before gameplay among the participants.
2. Educators may want to have a longer playing period (like two hours) so that the participants can interact more with the game.
3. Teachers should allow participants to relate the game directly to their own line of professions and culture such as local map and language so that immersion, attention, and motivation could increase.
4. Teachers should consider the cultural and religious issues in the game.

5. Teachers can change the game scenarios for a more relevant one, if possible. For instance, we updated the scenario with Turkish independence war started by Ataturk, the founder of Turkish Republic.
6. Players should use as many game elements as possible during building up railroads and rail stations because the game provides a complex railroad construction process similar to real work conditions, which might promote engagement.
7. Teachers should encourage players to foster collaboration and communication during gameplay by grouping students.
8. The game is not playable on tablet or mobile, so students will need a computer.

RELATED GAMES & MEDIA

Railroad Tycoon (https://en.wikipedia.org/wiki/Railroad_Tycoon)

Railroad Tycoon 3 (https://en.wikipedia.org/wiki/Railroad_Tycoon_3)

Sid Meier's Railroads! (https://en.wikipedia.org/wiki/Sid_Meier%27s_Railroads!)

SimSig (<https://en.wikipedia.org/wiki/SimSig>)

Train Fever (https://en.wikipedia.org/wiki/Train_Fever)

FURTHER READING

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