The goal critical thinking sample



What concepts did the match game illustrate?

Alex Rogo invented the match game in order to create the ideal system describing the dependent events and statistical fluctuations in the manufacturing plant. He imagined that the bowl is the resource and the amount of the matches in the bowl is the capacity of each resource, in the actual plant it is the capacity of the certain worker. The match game had shown that the more chains are involved in the process the more the system is balanced and the less is the range of statistical fluctuations. There is certain planned output for each plant. According the match game, there is no dependence between the first chain and the end result of the process. The more variable are the middle chains in the production process. In order to reach the planned output the plant has to decrease the number of the production chains and increase the capacity of the worker by using more mechanical work than manual, the capacity of each production process unit should not vary, it must be practically equal.

Controlling the hike of the entire troop. What problems did the troop experience? How did Alex control the hike?

Alex Rogo faced the problem of delays in the schedule. According to his calculations, the speed of the first Boy Scout was 2 miles per hour, but in fact the speed of the whole troop was far less. In order to increase it, he placed the slowest Boy Scout in the front and the fastest in the end in order to make the speed of the troop average. Also, he decreased the length of the space between each Boy Scout. In fact, he realized the ideal system he used in the match game. He made practically equal the capacity of each Boy Scout. He eased the rucksack of the front boy, who was the slowest in the troop. By that means, he could increase his speed and he did it in fact. Also, Alex loaded the rucksacks of the boy scouts at the end of the troop so that they slowed down their speed and it was equal to the speed of the front leader. As a result, the troop managed to cope with the schedule.