# Chapter 10 Business Case as a Tool for Educating Schoolchildren

Elena Kazakova St. Petersburg State University, Russia

### ABSTRACT

The practice of working with business cases contradicts all basic school education organizations' canons. Judge for yourself: the authors of the cases do not know initially how to solve them. They often do not even guess which methods they should use to do so. Moreover, they are not always sure that they formulate the problem correctly. However, students for some reason find such problems to be the most interesting to solve. The middle adolescence is the age when young people are in search of themselves. Therefore, these cases, dictated by the chaos of a changing life, serve as a real window to the world of future destiny for them. The chapter will consider the process of selecting enterprises that can become the authors of cases, reveal the stages of case creation, describe the problems that the designers of cases are faced with, analyze in detail the experience of organizing the educational process based on cases with schoolchildren, and provide examples of high quality scientific and technological cases.

### METHOD OF ANALYSIS OF SITUATIONS

College students who volunteer for the Nanograd<sup>1</sup> educational program always begins their training with mini case studies.

Here are some examples:

1. Absorption towers

DOI: 10.4018/978-1-5225-6951-0.ch010

#### Business Case as a Tool for Educating Schoolchildren

A chemical plant has run into an issue with absorption towers. They are often used for dissolving a gas into an acid, with the gas introduced at the bottom of the tower, and the acid poured in at the top. In order to increase absorption efficiency, towers are usually filled with inert ceramic objects (Raschig rings). However, the rings often break as they fall down and collide with each other, which makes this method much less cost-effective.

### 2. Ancient air

A prominent scientific journal once published the following announcement: "I will provide samples of air from the past three centuries for your research needs." Meteorologists were the first to take an interest in this offer, as they had long wanted to know what the composition of air was 100 and 200 years ago. But where could the supplier get such samples without a time machine? Can such an announcement be considered trustworthy?

### 3. Metal balls

Small metal balls are made by spraying molten metal into water, where the droplets solidify. But here's the problem: when metal droplets hit the water surface, they often get flattened like pancakes. Sometimes they even break into smaller droplets, which is absolutely unacceptable. Suggest a technological solution to this problem.

#### 4. Pouring oil on troubled waters

Modern nanotechnologists have coined the comic term "nano nonsense," which they use to denote deliberate lies wrapped in fancy terms. Consider the famous legend about sailors calming the waves around their ship by pouring oil into the sea. Is it "nano nonsense" or not?

#### 5. Tennis balls

You get a request from a tennis club owner: a supplier offers them tennis balls that serve six times longer than usual, while their price is only four times higher. The club owner asks you for advice: should this supplier be trusted? Will the investment be cost-effective?

Someone will say that these are just ordinary heuristic problems; however, these simple problems pave the way to complex case studies. (Word problems by Latypov, Elkin, Gavrilov, Kazakova, Erlikh)

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

global.com/chapter/business-case-as-a-tool-for-educating-

schoolchildren/212895

## **Related Content**

# Teaching and Learning Cultural Metacognition in Marketing and Sales Education

James E. Phelan (2021). *Research Anthology on Business and Technical Education in the Information Era (pp. 819-831).* 

www.irma-international.org/chapter/teaching-and-learning-cultural-metacognition-in-marketingand-sales-education/274398

## Enterprise Systems Education: A Vendor's Approach - Oracle University's Practice

Frank Linand Tony Coulson (2007). Enterprise Systems Education in the 21st Century (pp. 339-357).

www.irma-international.org/chapter/enterprise-systems-education/18510

# Facilitating a Hierarchy of Engagement: Corporate Education in Virtual Worlds

Paul R. Messinger, Xin Ge, Glenn E. Mayhew, Run Niuand Eleni Stroulia (2010). *Virtual Environments for Corporate Education: Employee Learning and Solutions (pp. 194-217).* 

www.irma-international.org/chapter/facilitating-hierarchy-engagement/42237

## Rationale and Challenges of Technical Vocational Education and Training in Uganda

James C. Okwareand Willy Ngaka (2017). *Technical Education and Vocational Training in Developing Nations (pp. 26-44).* 

www.irma-international.org/chapter/rationale-and-challenges-of-technical-vocational-educationand-training-in-uganda/176886

### Social Change and Social Responsibility

Karim A. Remtulla (2010). Socio-Cultural Impacts of Workplace E-Learning: Epistemology, Ontology and Pedagogy (pp. 1-22). www.irma-international.org/chapter/social-change-social-responsibility/42873