## **ELEARNINGNEWS ARTICLE**

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## How to apply the Pareto principle to learning

In general, teachers dedicate 80% of their time to 20% of students. Especially if we are talking about adult training programs, there are some rules to keep in mind.

In 1896, one of the greatest Italian economists and sociologists, Vilfredo Pareto (1848-1923) showed that about 80% of the wealth in Italy was owned by about 20% of the population. These observations were generalized by Joseph Juran in what we now call the "Pareto Principle" or in the "**80/20 law**": "20% of the causes cause 80% of the effects".

In this principle the actual numbers - 80 and 20 - are not the most important element to consider, but rather the notion that efforts do not follow a balance with respect to achieving the ultimate goal: a small percentage of effort can produce very good results.

The 80/20 principle finds application in a surprising multitude of areas and disciplines. For example, in the business world:

- 80% of a company's profits are linked to 20% of its customers;
- 80% of a company's sales are generated by 20% of its products;
- 80% of a company's sales are made by 20% of sales personnel;
- 80% of sales are made to 20% of customers;
- 20% of employees earn 80% of income;
- 80% of the complaints registered by a company are made by 20% of its customers.

In the field of computer science, the Pareto principle can facilitate optimization efforts. For example, Microsoft noted that focusing on 20% of the bugs (those most commonly reported by users) 80% of system crashes can be eliminated.

In the field of health and safety, the Pareto principle can be used to prioritize risks. Assuming that 20% of risks can lead to 80% of accidents and injuries, we can concentrate on eliminating these risks.

What is the application to training? When designing adult learning programs, keep these 3 rules in mind:

- Identify 20% of the course content that is actually central and focused on teaching the latter; do not focus too much on the remaining 80%.
- Of this content, make sure that only 20% is theoretical knowledge and that 80% is applied and applicable knowledge at work.
- Design, as far as possible, 80% synchronous learning and 20% asynchronous learning.

**1.** For example, according to this concept, how to teach English to a student? In the vocabulary of the basic English language there are over 250,000 words, but only about 5,000 words are needed to read and understand a written text, while to maintain a basic conversation even less are needed. As a rule, the most common words are the most useful. Learning all the 250,000 words giving them the same importance would take a long time, not to mention that learning the rarer words would not give much benefit. So it makes sense to focus on the goal and create a course that teaches about 3,000-5,000 words.

**2.** Creating a training path based on the elementary mnemonic study is perhaps not the most useful strategy. It is better to create vocabulary, spelling and examples of 10 minutes, followed by 50 minutes of conversation, in order to learn applying in real life the terms studied.

3. Lessons do not necessarily need to be conducted face to face, but it is useful for the application to be synchronous.

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