Chapter 9

3P Principles for Improvement of E-Accessibility

ABSTRACT

The accessibility of the sources, materials, and activities on the internet are part of the functioning interaction in the 21st century. There are plenty of barriers in the internet environment for people with dyslexia. The literacy portal alleviates the problems that people with reading disabilities face. Its tools and materials support discovery, understanding, and usage of the internet, as well as ICT resources to improve their effective usage in everyday life. The experiences gathered while creating the portal are recorded here for their usage in the methods proposed in further chapters.

INTRODUCTION

This chapter aims to introduce the reader with the principles of accessibility: perceive, understand, and operate in the context of the electronic sources. The authors introduce the reader to the Dyslexbrowser tool and show how to adapt the text on the internet with its usage to make it more accessible for people with dyslexia. Afterward, the authors summarize the rules for the creation of the reader's friendly text for individuals with dyslexia applied to the creation of e-learning. In the previous chapters, the authors already provided information about e-learning as a form of education, which is supported by the usage of informational and communicational technologies. It is used in formal as well as informal education. It works with presentations, texts,

anchors, animated sequences, videos, and shared desktop. E-learning contains lots of minor activities, which can be interlinked in the complex system, but it isn't necessary. The communication with the lecturer and schoolmates, testing, and training, happen in this context. It can be turned into completely remote courses as well as just a complementary part of the local courses. E-learning uses different ICT resources such as the publishing of the study materials to the internet, tests, educational exercises, discussion forums, and others. E-learning is, therefore, a very convenient way for lifelong education.

As we mentioned in the previous text, the Literacy portal was built to create a space supporting people with their problems in reading based on informal processes. Even though the portal creators focused their goals and effort towards the needs of people with dyslexia, they paid attention mainly to the barriers these people faced in their lives as a result of weaker reading competencies.

Special tools and resources became available on the internet as a way to manage these barriers.

The portal creators were building upon the bio-psycho-social model of the disability, which perceives the disability in the context of the interaction and functioning of the person in their physical, cultural, and living environment (Vojtová, 2010). From the perspective of the model, communication via informatics and communication technologies (ICT) belongs to the processes, which allows functional interaction. The barriers and insufficient competencies for their usage therefore, pose risks to the quality of life and functioning in modern society not only for people with dyslexia but also for all other people whose interaction via this form is weakened due to the weaker/insufficient reader competencies. The mediation of the access to tools and resources of the internet was, therefore, a vital goal of the research.

AVAILABILITY

Since the portal creators wanted to measure the *accessibility* of the electronic resources by the comparable effectiveness in the usage of the product or service between a person with a disability and without (NARASIMHAN, N, 2010), their efforts focused on the daily activities of a typical person and the ends to which these means were used to improve access The portal creators were taking into account three fundamental principles of accessibility

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