Education for Sustainability: Learning Methods and the Current State in Slovenia (a Preliminary Study)

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ABSTRACT

The purpose of this article is to analyse and interpret the current state of the Education for Sustainable Development in Slovenia, EU. The primary goal is to select the best learning methods for the upcoming international training programme, developed within the EU co-funded project (Erasmus+ KA2) The article presents the analysis of the state on the Slovenian education market with a focus on adult education and lifelong learning target groups. The results show that traditional training methods are still most widely used; newer learning methods (gamification, online, mobile learning, storytelling) are rarely used. The results of the interviews (preliminary study) show that entrepreneurs, which were included in the research, missed the sustainability topics in their educational path. Lastly, examples of the learning methods used by the case-study educational company are shown. The article is usable for organizations, which are preparing new online training programmes about sustainability topics.

KEYWORDS

Learning Management Systems, On-Line Learning, Training Methodologies, Training Organizations

INTRODUCTION

Education for sustainability or education on sustainable development (ESD) is one of the best tools to raise the awareness and consequently actions of the people towards a more sustainable future. Education for (about) sustainability is to ensure the survival of the people (Holthaus, 2008, p. 99). Its purpose is to build values beyond self-interest (Holthaus, 2008, p. 103). Inclusion of the sustainability topics into the curriculum impacts to some extent the student’s views, attitudes, and behaviour towards sustainable behaviour (Shephard, 2008; Sidiropoulos, 2014). ESD is more a frame-of-mind, which originates in our identity and is intrinsic to authentic human consciousness than a policy (Bonnett, 2006). The terms ESD and ‘global education’ are sometimes interchangeably used and its relation is discussed in (Scheunpflug & Asbrand, 2006). Also, the term ‘environmental education’ is sometimes used (Bonnett, 2006), although it covers only a part of ESD (Kopnina, 2012). More recent research studies (Andrews, 2015) argue that ESD, especially education on design thinking and circular economy enhances the employability. Teaching techniques for ESD are discussed in (Figueiró & Raufflet, 2015), who found the lack of consistency in the concepts used in their systematic literature review. The majority of the research studies revolve around the inclusion of the ESD in official study programmes from primary to tertiary level (Allen, 2019; Leal Filho et al., 2018). Less of the articles and similar work is focused
on the inclusion of ESD in non-formal and lifelong learning field, which has been researched to some extent by authors (Draghici, 2019; Draghici, Fistis, Albulescu, & Draghici, 2015; Draghici, Rozman, & Fistis, 2015; Fistis, Rozman, Riel, & Messnarz, 2014; Mircea et al., 2018; Rozman, Draghici, & Riel, 2016; Rozman, Vajde Horvat, Lešnik Štefotič, & Fluks, 2012).

Nevertheless, ESD should not be mixed with the term ‘sustainable education’, which refers more to resilient learning (Sterling, 2010).

Within this article, the literature review was narrowly focused on the Slovenian authors and target group. The following issues were investigated: 1. Which learning methods are being used by the training organizations in Slovenia and 2. In which specific sustainability-related topics are potential learners interested in.

A brief analysis of similar work among Slovenian authors (using keywords ‘education for sustainability’) shows the following state of the art. The publications about mentioned topic started to appear in 2008. They are presented in the next chapter sorted by the target groups.

The rest of the article is structured as follows. After the literature review, several Slovenian training organizations were analysed by reviewing their publicly available online information as the potential learner sees them. After that, the answers gathered within the focus group performed during the project presentation event were analysed. Lastly, one of the training organizations was chosen and its online learning methods were presented, which could provide some valuable insights for other training organizations.

The purpose of this preliminary research study is to prepare a solid foundation for the new sustainability course from the viewpoint of the content and the learning methods.

ESD in Kindergartens

Petek talks in her article ‘Do ESD starts already in kindergarten?’ about the pre-school curricula. She claims that teachers have enough manoeuvring space within the existing curriculum to cover sustainability (environmental) topics (Petek, 2007).

Lepičnik-Vodopivec presents empirical research study among the teachers in the kindergartens. The results show that sustainability topics are well integrated into the curriculum and implemented in everyday education of pre-school children (Lepičnik-Vodopivec & Tominc, 2011).

Pivec in his article presents the work of Aleksandra Kornhauser Frazer as a ‘mother’ of the sustainability education worldwide (Pivec, 2009). Citing from her bibliography: “In 1999, she was awarded the Honda prize for her contribution to the implementation of the environment – friendly manufacturing processes. She was part of a development process for an information system that monitors and helps control harmful industrial waste. She is (still) the only woman that has got the prize.”

ESD for Teachers

Simoneti in her article sets a thesis that urban planning must include all the stakeholders and it should include sustainability aspects early in the urban design phase. She concludes with the call to include more sustainability topics to the primary schools (Simoneti, 2010).

Lukman presents the preconditions for the integration of sustainability topics to the schools. She claims that sustainability topics are not some kind of appendixes to the existing curriculums but should be included systemically (Lukman, 2008).

Vovk-Korže describes pre-requirements, which are needed to include practical and experience-based methods of teaching of sustainability topics to schools (Vovk Korže, 2011).

Kolnik presents the results of the research study among future teachers of geography in university programmes (Kolnik, 2011). Results show the teachers are more aware of ecological aspects of sustainability, less aware of economic aspects of sustainability and even less aware of its social aspects. In the other article, (Kolnik, 2007) states that geography has an integrative role between natural and humanistic sciences when designing sustainable urban plans.