Školení v oblasti profesního rozvoje pro pedagogy v první linii vzdělávání dospělých

**Modul 1:** 

Úvod do teorie mikrovzd**ě**lávání





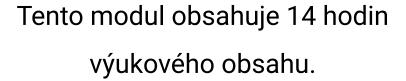






### MODUL 2





# 6 hodin výuky F2F

Tato prezentace zahrnuje 6 hodin výuky F2F.Je k ní přiložen Plán výuky pro facilitátora.

# 8 hodin samostatného u**č**ení

Projděte si prezentaci se samostatně řízenými výukovými zdroji vlastním tempem!





# Úvod



Tato prezentace obsahuje devět zdrojů pro samostatné učení a cvičení pro sebereflexi.

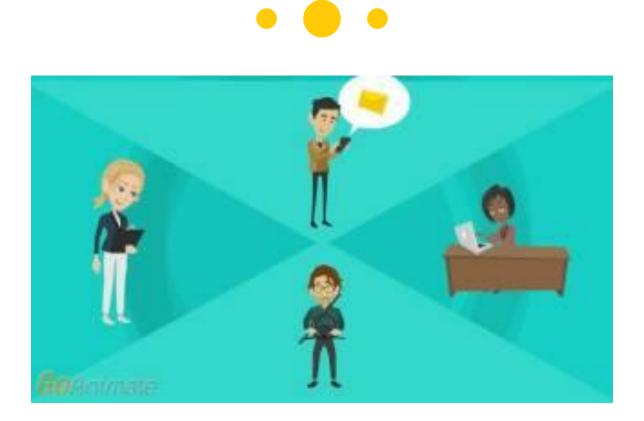
Neváhejte si vybrat zdroje, které nejlépe **odpovídají vašim zájmům** a vzd**ě**lávacím cílům.

Tyto zdroje můžete zkoumat samostatně, bez předepsaného pořadí nebo požadavku projít všechny.





## 1. Přehled a definice mikrovzdělávání







## 1. Příklady mikrovzdělávání







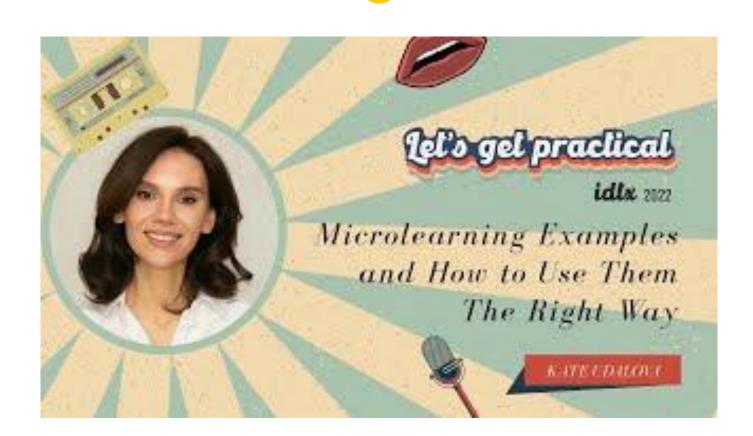
## 2. Mikroučení: Proč je důležité







## 2. Příklady mikrovzdělávání

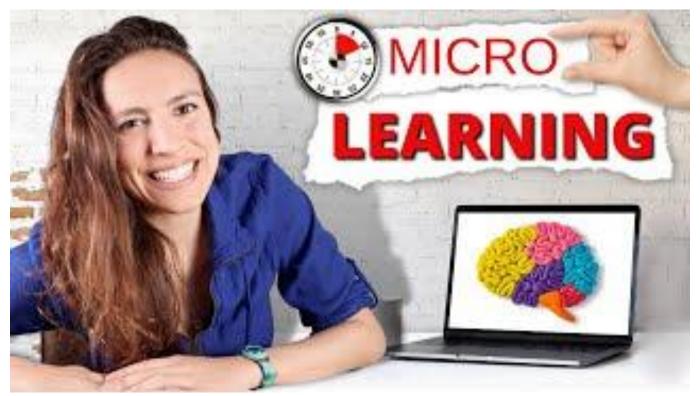






# 2. Příklady mikrovzd**ě**lávání









# 3. Výhody mikrou**č**ení







# 4. Osvědčené postupy v oblasti mikrovzdělávání





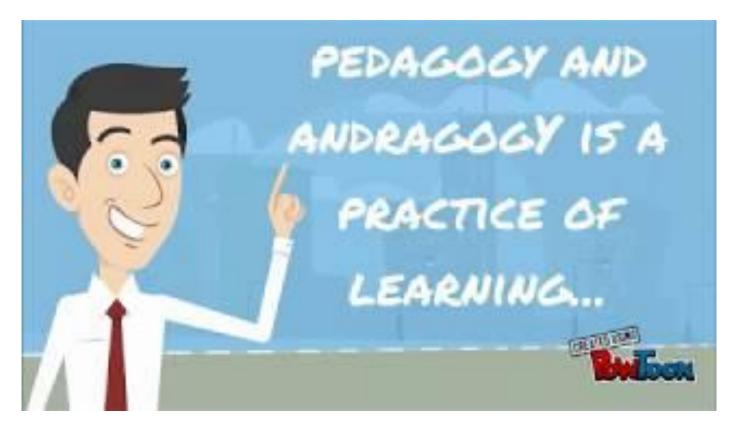


### II. Teorie vzdělávání dospělých



## 1. Andragogika vs. pedagogika







### II. Teorie vzdělávání dospělých



# 2. Uplatnění principů vzdělávání dospělých v mikrovzdělávání





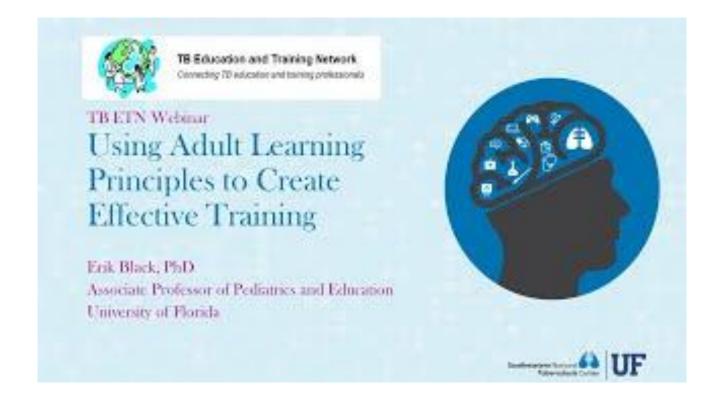


### II. Teorie vzdělávání dospělých



# 2. Využití principů vzdělávání dospělých k vytvoření efektivního školení









## 1. Vyprávění příběhů v mikrovzdělávání







### 2. Gamifikace v mikrovzdělávání







# 3. Jak vytvořit poutavé kurzy pro dodržování předpisů pomocí gamifikace a mikrovzdělávání



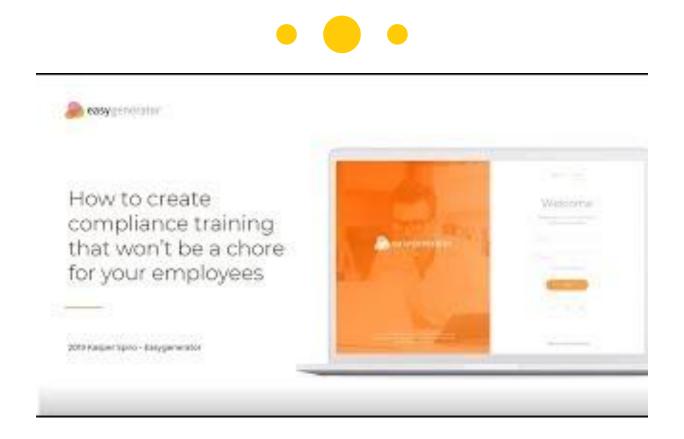




### III. Navrhování efektivních modulů mikrovzdělávání



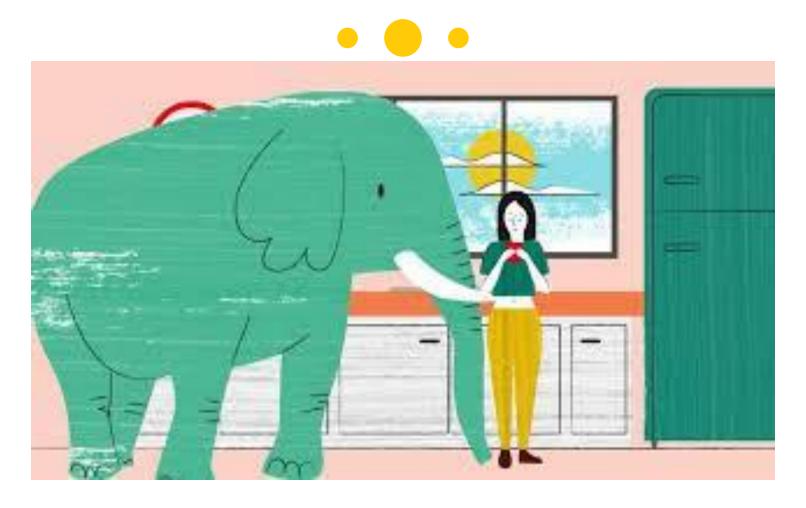
## 3. Jak vytvořit poutavé online dodržování zásad







# 4. Mikroučení: Důležitý nástroj ve vaší strategii vzdělávacího obsahu







### 1. Technologie a platformy









1. Metody měření účinnosti mikrovzdělávání





The current issue and full text archive of this journal is available on Emerald Insight at: https://www.emerald.com/insight/2205-2062.htm

### A review of the trend of microlearning

Received 13 October 2020 Revised 5 November 2020 Accepted 28 November 2020

Kelvin Leong and Anna Sung Chester Business School, University of Chester, Chester, UK David Au

Department of Geography and Resource Management, The Chinese University of Hong Kong, Hong Kong, China, and Claire Blanchard

University of Wales Trinity Saint David, Carmarthen, UK

Purpose – Microlearning has been considered as a promising topic in work-based learning. This paper aims to review the trends of microlearning in terms of related publications and Internet searches. Hopefully, the findings can serve as a reference for the education sector, government, business and academia to promote, design and use microlearning.

Design/methodology/approach — In this study, two sets of analysis were conducted Firstly, the authors analysed the publication trend of microlearning. Second, the authors analysed the trend of Internet searches related to microlearning. More specifically, the authors analysed real-world data of 14 years obtained from Scopus and Google Trends for the purpose. These data include the first relevant publication found in the

Findings - In total, 476 relevant publications have been identified during 2006-2019. According to the findings from the analysis of the identified publications, microlearning is a relevantly new and emerging global topic involving authors, affiliations and funding sponsors from different countries. Moreover, many microlearningrelated publications were conducted from perspectives of e-learning or mobile learning. Furthermore, the authors notice higher education was the most frequently mentioned education level in the identified publications. On the other hand, language learning (i.e. second language, vocabulary learning, etc.) had been mentioned more times in the titles and abstracts than other subject areas. Overall, the increasing trend of publications on "microlearning" (as a knowledge supply) is in line with the established increasing Internet searches of "microlearning" (as a practical demand) in recent years

Practical implications - From the work-based learning perspective, microlearning has been considered as one of the key topics in talent development topics. Policymakers, educators, researchers and participators have the responsibility to explore how to promote, design and use microlearning to help people to learn in the right direction through valid knowledge with ethical consideration.

Originality/value - Although many works had been done on microlearning, there is a lack of comprehensive studies reviewing the trends of microlearning in terms of related publications and Internet searches. This study aims to fill this gap by analysing real-world data obtained from Scopus and Google Trends - these data include the first relevant publication found in the database. The authors believe this is the first time that a study has been conducted to comprehensively review the development trends of microlearning. Hopefully, this study can shed some light on related research.

Keywords Microlearning, e-learning, Learning, Work-based learning

Paper type Research paper



In recent years, microlearning has been considered as a promising topic in work-based learning. This paper aims to review the trends of microlearning in terms of related

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### 1. A review of the trend of microlearning - link

(45 minut **č**tení)



Scientific Bulletin Vol. XXII No 1(43) 201

#### MICROLEARNING AN EVOLVING ELEARNING TREND

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#### ABSTRACT

This article is analyzing the meanings of the micro-learning rend, as they have emerged and developed over the last few years. Exploring how the term micro-learning is used to organize and order a set of pedagogical and technological phenomena and concepts in new and interesting ways. It is brought into focus the most popular and widely used learning management platforms that embrace this concept.

#### KEYWORDS:

Micro-learning, elearning, micro-content

#### 1. Why micro-learning?

Social, economic and technological everyday changes trigger new concepts and strategies which support learning. Education needs transformations in an appropriate way in which we live, work and learn. Recent studies indicate that a short content may increase information retention by 20 %. Researchers at Dresden University of Technology in Germany have launched a study to examine this issue.

It is well known that most e-learning materials format is a piece of content, followed by an evaluation question. The study's goal was to see if students respond better to these questions when they watched several small pieces of content answering many appropriate questions, or when they watched large amounts of content with fewer evaluation sections. So, the e-learning material was sixteen chapters of content and the students were divided into three groups, as following: the first group responded to a question after

reading each of the 16 chapters; the second group answered four questions after reading each group of four chapters; group number three received eight questions after each half of the original text. Passing through this first stage, in the second stage students have supported the same test of multiple choice items covering the whole course material.

Results demonstrated that smaller slices content helped participants to better retain information and better perform in each of the two stages:

- the first group took 28 % less time to answer their assessment questions than the third group, and did 20 % better;
- the first group performed 8 % better on the comprehensive test than the second;
- students in the third group had to read again more than three times the number of sections than the first group did;
- in the second stage of the study, the first group accomplished 22.2 % better

DOI: 10.1515/bsaft-2017-0003

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### 2. MICROLEARNING: AN EVOLVING ELEARNING TREND - link

(30 minut čtení)

Education Tech Research Dev (2022) 70:363-395 https://doi.org/10.1007/s11423-022-10084-1



#### RESEARCH ARTICLE



#### The Effects of Microlearning: A Scoping Review

Ai-dung Taylor<sup>1</sup> · Woei Hung<sup>2</sup>

Accepted: 13 January 2022 / Published online: 26 January 2022 © Association for Educational Communications and Technology 2022

#### Abstract

Microlearning has gained popularity in both the training industry and professional studies disciplines over the last several years. While substantial information exists in industry articles and commentaries on the definition of microlearning—along with how to create, develop, and implement it—a closer look at the existing research is important. Further study is needed to understand how to inform instructional design professionals of current trends and the effects of microlearning training on the enhancement of learner performance in both workplace and academic settings. Thus, this scoping review aims to examine the literature and identify noticeable trends, patterns, and evidence of how microlearning has been used and implemented in both academic learning and industry training settings.

Keywords Microlearning · Adult education · Scoping review · Learning environments · Instructional design

#### Introduction

The concept of microlearning has gained popularity in the training and learning industry and professional studies disciplines over the last several years (BasuMallick, 2018; Göschlberger & Bruck, 2017; Giurgiu & Bălcescu, 2017; Gutenberg Technology (GTI, 2019; Oesch, 2017; Pandey, 2019; Seidel, 2018). The rise of internet social media has changed people's information-seeking and consuming behaviors, which gears their preference toward single, discrete topics that are presented in a short duration to meet their moment of learning need. To satisfy such preferences, companies are providing resources and information to promote use of the microlearning approach in the work-force (Andriotis, 2018a; BasuMallick, 2018; Selko, 2019; Smith, 2016). At present, microlearning is still an emerging and evolving instructional approach; thus, a standard definition or format does not yet exist. However, generally speaking, microlearning may be described as "a form of e-learning delivered in small chunks, focused on delivering skill-based and just-in-time knowledge" (JTT) (Zhang & West, 2020, p. 310).

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(1 hodina **č**tení)

ICON plc, ICON University, Dublin, Ireland

Multimedia Tools and Applications (2021) 80:3121-3151 https://doi.org/10.1007/s11042-020-09523-z



### Integrating micro-learning content in traditional e-learning platforms

Received: 16 October 2019 / Revised: 27 July 2020 / Accepted: 4 August 2020 / Published online: 19 September 2020

The Author(s) 2020

#### Abstract

Lifelong learning requires appropriate solutions, especially for corporate training. Workers usually have difficulty combining training and their normal work. In this context, microlearning emerges as a suitable solution, since it is based on breaking down new concepts into small fragments or pills of content, which can be consumed in short periods of time. The purpose of this paper is twofold. First, we offer an updated overview of the research on this training paradigm, as well as the different technologies leading to potential commercial solutions. Second, we introduce a proposal to add micro-learning content to more formal distance learning environments (traditional Learning Management Systems or LMS), with the aim of taking advantage of both learning philosophies. Our approach is based on a Service-Oriented Architecture (SOA) that is deployed in the cloud. In order to ensure the full integration of the micro-learning approach in traditional LMSs, we have used two wellknown standards in the distance learning field: LTI (Learning Tools Interoperability) and LIS (Learning Information Service). The combination of these two technologies allows the exchange of data with the LMS to monitor the student's activity and results. Finally, we have collected the opinion of lectures from different countries in order to know their thoughts about the potential of this new approach in higher education, obtaining positive feedback.

Keywords Micro-learning · Learning Tools Interoperability (LTI) · Learning Management System (LMS) · Learning Information Service (LIS)

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# 4. Integrating micro-learning content in traditional e-learning platforms - link

(1 hodina **č**tení)





#### G OPEN ACCESS

Citation: Gross B, Rusin L, Klesewetter J, Zottmann JM, Fischer MR, Prückner S, et al. (2019) Microlearning for patient safety: Crew resource management training in 15-minutes. PLoS ONE 14(3): e0213178. https://doi.org/ 10.1371/journal.opes.0213178.

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Data Availability Statement: The full dataset of video recordings cannot be shared public because participants would be identifiable. It was a requirement of the Ethics Committee to not store or share those recordings beyond the immediate study purposes. All relevant data to reproduce the intervention are within the manuscript and its Supporting information files.

Funding: AZ has received research grants from Klinikum der Universität München, Grant number FöFoLe 576. The funders had no role in study

#### RESEARCH ARTICL

## Microlearning for patient safety: Crew resource management training in 15-minutes

Benedict Gross 61\*, Leonie Rusin1, Jan Kiesewetter2, Jan M. Zottmann2, Martin R. Fischer2, Stephan Prückner1, Alexandra Zech1

 Institute for Emergency Medicine and Management in Medicine, University Hospital LMU Munich, Munich, Germany, 2 Institute for Medical Education, University Hospital LMU Munich, Munich, Germany

\* benedict.gross@med.uni-muenchen.de

#### Abstract

#### Objectives

We sought to establish the feasibility of chunking crew resource management (CRM) training into micro-size interventions and to compare different training approaches in the context of micro-learning.

#### Design

We evaluated whether participants in micro-learning CRM activities achieved learning objectives following training. In a between-subjects design, groups were observed for behaviour during a simulation that was part of a 15-minute modular intervention and tested for recollection afterwards.

#### **Participants**

The 129 participants recruited for this study were medical students, who already had relevant experience treating patients.

#### Interventions

The experimental setting involved three 5-minute components: video, simulation, and debriefing. Different groups viewed videos involving different didactic concepts: one group observed a videotaped concrete example of a medical care team applying a CRM tool (example group), and one group observed a videotaped lecture on the same topic (lecture group).

#### Main outcome measures

All simulations were videotaped and coded in detail for the occurrence of and time spent engaging in team behaviour and medical care. Questionnaires were administered before, immediately after, and two weeks after the intervention. We compared the groups' behaviour during the simulation (team cooperation and medical care), retention of knowledge from the training content, and results of the evaluation.

1/2







# 5. Microlearning for patient safety: Crew resource management training in 15-minutes - <u>link</u>

(45 minut **č**tení)



### Otázky k sebereflexi





Tyto otázky k zamyšlení vám mohou pomoci shrnout vaše znalosti, ur**č**it oblasti, ve kterých můžete zlepšit své dovednosti, a stanovit strategii, jak lépe využívat techniky mikrou**č**ení v oblasti vzd**ě**lávání dosp**ě**lých.

- 1. Jaké klíčové koncepty a principy mikrovzdělávání jsem se během tohoto modulu naučil/a?
- 2. Jak se tyto koncepty shodují s mým předchozím chápáním vzdělávání dospělých a teorií učení?
- 3. Jaké konkrétní přínosy mikrolearningu ve vzdělávání dospělých jsem shledal/a nejpřesvědčivějšími a proč?
- 4. Podařilo se mi aplikovat některou z technik mikroučení, které jsem se naučil/a, na vlastní vzdělávací kontext nebo práci? Pokud ano, jaké byly výsledky?



### Otázky k sebereflexi





- 5. Podařilo se mi aplikovat některou z technik mikrovzdělávání, které jsem se naučil/a, v kontextu vlastního vzdělávání nebo práce? Pokud ano, jaké byly výsledky?
- 6. Jaké příklady z modulu mě zaujaly a jak bych mohl/a podobné strategie upravit nebo použít ve své vlastní praxi?
- 7. Jak se v důsledku této vzdělávací zkušenosti vyvinuly nebo prohloubily mé názory na teorii vzdělávání dospělých?
- 8. Jak mohu začlenit principy mikrovzdělávání do svého průběžného profesního rozvoje a iniciativ v oblasti vzdělávání dospělých?







Děkujeme, že jste si prošli těmito aktivitami pro samostatné učení.

Pokud se vám tento modul líbil, doporučujeme vám prozkoumat další zdroje ONE STEP UP.























