



Co-funded by the  
Erasmus+ Programme  
of the European Union

# Best practices of the project Academy of Modern Senior - Critical Thinking for seniors (CriThink)



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## Partnership

This project was launched in 2019 as a strategic partnership of 5 organisations representing different regions of Europe:



**Prave ted! o.p.s.** (the Czech Republic, project coordinator) is a nonprofit organisation based in Prague, founded in 2012. The organisation is dedicated to so-called „active seniors”, those who live in their homes and who apparently do not need anything. Nevertheless, “seemingly nothing” is significant given the fact that our population is ageing and is experiencing an increasing age, but quite often, it does not have fulfilment, meaning or purpose. Prave ted! o.p.s. organise educational, physical and social activities for them. The largest educational project is the Academy of Modern Seniors (AMOS), which reflects the current needs of seniors and provides physical activities such as Nordic Walking, Molkky, Swimming and much more. One of the core activities is memory training and its combination with physical activities.

Website: <https://pravetedops.cz/>



**Ljumska Univerza Rogaška Slatina** (Slovenia) has been present in the area of Obsotelj and Kozjansko since 1959 with educational programs and other activities. All these years, we have been putting into practice the idea of making lifelong learning accessible to people of different generations. We implement programs in many places outside the headquarters of our organisation. By successfully applying for tenders, we obtain national and European funds and thus provide citizens with free education. Ljumska Univerza Rogaška Slatina has become a Language Center, provides Slovene for foreigners and offers the Intergenerational Center to

all citizens. We connect with partners in the local environment, and beyond, we are open to new ideas and collaborations. We not only offer citizens the opportunity to join educational programs, but we also provide free information and counselling, organised independent learning and learning assistance.

Website: [www.lu-rogaska.si](http://www.lu-rogaska.si)



**Fundacja Pro Scientia Publica** (Poland) has been operating since 2010 in the field of adult education, promoting several initiatives focusing on elderly citizens and their social inclusion. Our staff is experienced in teaching adult and elderly people, and we are providing workshops and seminars regarding: techniques and methods of teaching senior students, edutainment, development of the key competencies of seniors', ICT and social media inclusion of elderly people, security on the Internet of elderly people, critical thinking. Fundacja Pro Scientia Publica also has rich experience in the field of research in adult education. We coordinated, managed or supported many international programs regarding the curricula for adult education training, defining key competencies, preparing workshops, lectures, and seminars.

Website: <https://proscientiapublica.pl>



Institut für Interdisziplinäre Bildung (IIB, Austria) sees itself as a pool of ideas and concept developers in education and training in order to increase opportunities in the education and labour market. The business areas range from digital school development to international educational and labour market policy projects as well as individual research activities.

Website: [www.i-i-b.eu](http://www.i-i-b.eu)



**COFAC** (COOPERATIVA DE FORMACAO E ANIMACAO CULTURAL CRL, Portugal) is a non-profit cooperative, responsible for the management of Lusófona University, the largest private university in Portugal. The name of the University derives from the expression “Lusofonia”, which designates the common cultural and linguistic space demarcated by the use of the Portuguese language. It is the institution responsible for the scientific, cultural, social and economic development of this geographical and linguistic space with more than 200 million inhabitants.

Its objectives are “teaching, research in the various fields of science, culture and technology, in an interdisciplinary perspective and, especially, in order to develop the countries and peoples of the Portuguese language”.

Website: [www.ulusofona.pt](http://www.ulusofona.pt)



JŪSŲ PERSONALO PARTNERIS

**UAB “Alfa idejos ir technologijos”** (FITIN, Lithuania) is a team of HR professionals, experts in adult education and group relation. FITIN is the first HR company in Lithuania that started to implement HR management and adult training practice based on neuroscience research. As shown, the experience of FITIN clientele with neuroscience-based HR management solutions points directly to the fundamental reasons regarding employee engagement, motivation and cooperation and identifies the way how to purposeful invest and allocate resources intended for engagement, motivation and teamwork. It also helps find solutions to why people tend to accept any idea without discussing or confronting it.

Another field of FITIN activities is educational and voluntary activities. We work intensely in order to develop the emotional intelligence and critical thinking skills of our society and participate in different projects and initiatives. In 2015 FITIN was awarded by Quality prize for educational activities and educational projects.

Website: <http://www.fitin.lt>.

The partners in the project represent various sectors (universities, non-governmental organisations and private entities) engaged in adult education. Most of them are engaged in and have had wide experience in seniors education. Such a combination of skills, experience and approaches guaranteed the acquisition of new practical knowledge, which could be tested in other partner organisations inside the consortium.

## **Aim**

The main aim of the project was to define ways of working educationally with older adults (55+) in the area of critical thinking. Organisations represented by the partners, working with various topics in the afore-mentioned area, have inspired each other in many different ways. Thanks to the organisational synergy, we have finally composed a framework for defining the term 'critical thinking' for educational purposes, and we have constructed concepts of educational activities which could upgrade the critical thinking ability of older adults.

Inspiration for the project was the conclusion of the coordinator - Právě teď! o.p.s. after conducting courses for seniors. Courses dealing with *Information and disinformation* organised for seniors in Prague revealed a lack of critical thinking ability among older participants. It was a starting point in turning attention to the needs of a wider community - families of seniors, grandchildren, etc. Finally, we concluded that almost everyone should be interested in the effects of the project because critical thinking should be assumed to be one of the key competences in our world dominated by information. The ability to recognise information as true or false seems to be crucial for effective work and decision-making processes.

## **What have we done?**

During the kick-off meeting in Lisbon, the key points of the project were agreed upon. The presentation of research related to seniors was a good start in rethinking the project's

perspective. The next steps were related to inspirational books. Partners agreed to share opinions about different concepts of critical thinking, described or only “touched on” by authors in books and articles, and presented in research results:

- Stella Cottrell, *Critical thinking skills*,
- Hans Rosling, *Factfulness*,
- Eliezer Yudkowsky, *Harry Potter and methods of rationality*,
- Randall Munroe, *What if*,
- Mason Currey, *Daily rituals. How artists work*,
- Peter Cokan, *Kritično razmišljanje, priročnik za mladinske delavce (critical thinking: a guide for youth workers)*,
- Robert Cialdini, *Influence. Science and Practice*,
- Lamberto Maffei, *Elogio da lentidão*,
- José Cardoso Pires, *De profundis. Valsa lenta*.

Sharing partners’ experiences regarding positive and negative examples of critical thinking played the same role.

## **The pandemic and fake news**

The pandemic of COVID-19 created a new chance for spreading false information and cheating. Project partners described the most significant or shocking examples of fake news.

### **Austria**

During the Covid-19 crisis, Facebook users, internet users, and WhatsApp groups were overwhelmed by a flood of fake news on a scale we had never seen before. False messages were consciously and unconsciously spread, and these circulated virally on various social media or messaging services.

*Example:* “A voice message was spread via WhatsApp, explaining alleged findings of the University of Vienna and advising against taking certain painkillers. The Medical University then sharply denied the information in the message and called it fake news - but by then the voice message had already been shared countless times“. (available at: <https://www.news.at/a/fake-news-coronavirus-11395467> , last accessed June 11, 2020)

The distribution of fake news in Austria took on such abnormal proportions that the government was forced to set up a “digital crisis management team”, which was charged with identifying and marking false reports about the Coronavirus. In the first week alone, around 150 fake news items were discovered. Mainly conspiracy theories, trivialisation of the Coronavirus, proposals for treatment and self-diagnosis as well as allegedly upcoming regulations and restrictions for the population were circulated on the net, spreading fear and terror.

(available at: <https://orf.at/stories/3159533/> , last accessed on 11.06.2020)

In Austria, an association for education about internet abuse (Mimikama) has been active in this area since 2011. This association uncovers and fights fake news, internet abuse, Internet fraud, and false reports. Every social media user can contact this association and, if there is a suspicion, ask to make sure that fake news does not get caught. Furthermore, the association offers numerous workshops in the area of media competence “Learning how to recognise fake news”. (available at: <https://www.verein-mimikama.at/> , last accessed on 11.06.2020.) All pages already identified as fake news can be accessed at <http://www.hoaxsearch.com/>.

## **Czech Republic**

During the Covid crisis, a large amount of false or unverified information appeared in the Czech Republic in the period March-May 2020.

This information often incited a fear of the unknown, and people in fear and panic were less careful and cautious. Therefore, users of phones with the Android operating system (not only in the Czech Republic) managed to download an application that looked like a map of the spread of the Coronavirus, published by a certified Johns Hopkins University (Baltimore, USA). The application worked with data from this university, but there was a virus in it that blocked the phone system and required the payment of a “ransom” in bitcoins to restore access.

Email users received “guaranteed” emails from the World Health Organization (WHO) offering a vaccine against COVID-19, or various drugs for the disease, even though neither the vaccine nor a specific drug existed yet. Verifying the authenticity of an email was not difficult, but people still responded to the email and ordered a vaccine or medicine.

One of the biggest fake news was that IBUPROFEN (a painkiller) worsens the course of the disease. This information has been denied several times by the State Office for Drug Control of the Czech Republic (SUKL) and the Ministry of Health. SUKL stated that this drug would have to be dangerous, even if only during the common flu.

## **Lithuania**

In Lithuania, we have quite a moderate number of cases. Currently, we have had 1776 cases confirmed, most of which have recovered (1441), with 249 cases still in medical care, and 76 deaths have been confirmed (accordingly to data 16/06/2020).

From March 16, 2020, our country is in quarantine with travel restrictions to other countries. The quarantine is planned to be over on June 17, 2020. Lithuania, together with other Baltic countries – Latvia and Estonia - were among the first countries in Europe which formed a travel bubble (in May 2020, LT, LV and EE opened borders for their citizens and allowed them to travel between their countries).

At the beginning of the quarantine, we had a lot of stress and anxiety among our people and a lot of misleading information regarding the spread of the virus, the effectiveness of mask-wearing, contact with other people, etc. We had controversial information from different sources, e.g. whether the masks are effective or not. At the beginning of the Corona crisis, our country experienced a lack of masks, and the communication from official sources from our government was mainly about the importance of washing hands. Later, communication changed and wearing a mask was obligatory for everybody, but for many people, it was difficult to adapt to this situation as they were previously convinced about a completely different approach.



## Poland

The whole world is currently facing a significant crisis due to the Covid-19 virus pandemic. The world has not seen a virus spread on such a scale for many years, so it is no wonder that it creates even more fear in society. There are also myths, half-truths and misinformation concerning the spread of the disease. Many of the beliefs circulating on the web have nothing to do with the truth, and disinformation can lead to chaos. In this case, it is best to seek advice from those specialising in this scientific field.

One such is Dr Paweł Grzesiowski, President of the Board of the Foundation Institute for Infection Prevention and an expert in immunology and infection therapy. In one of his interviews, he gave key information about one of the myths circulating in the initial stage of the disease in Poland, which aroused much controversy, namely the collection of parcels from couriers. Some of the leading courier companies deliver 370-400 million shipments [annually?] to other companies. There has been a lot of speculation concerning how long the virus stays on the package and whether it was infected in some way during packaging. As it turned out, this is unlikely because although the virus can persist on cardboard for up to 24 hours, it is not the main route for spreading the infection. Besides, it is easy to deal with this danger because it is sufficient to wash or disinfect hands after unpacking as the virus does not penetrate the skin.

At the beginning of April 2020, Poland was in a state of high panic concerning pets, and the Internet was awash with pictures of cats and dogs which had been abandoned by their owners who feared being infected with Covid-19 through them. This is another myth. The World Health Organisation reported that so far no scientific evidence had been found that pets, such as cats and dogs, could be infected with the virus, meaning that they couldn't pass it on to humans. This also applies to birds, wild animals and insects. However, it is wise to wash one's hands after coming into contact with an animal.

One of the most amusing half-truths propagated in the crisis caused by Covid-19 was that the virus could be killed by drinking pure alcohol. This seems to be more like an invitation to a party than a sure way of protecting yourself against the killer virus. Such alcohol should only be used on the skin, but in moderation because overuse can damage the epidermis.

It should be remembered that not everything which appears on the Internet or in the media is true. A common problem currently is a lack of critical thinking when analysing content, so it

is essential to check all information as far as possible because it is easy to fall prey to false information that can do more harm than good.

## **Portugal**

Regarding the COVID-19 situation in Portugal, as of June 22, 2020, there were 12,310 reported active cases, 39,392 confirmed, 25,548 recovered, and 1,534 reported deaths.

The mortality rate through COVID-19 in Portugal is 5.5 per 100,000 inhabitants, therefore “inferior to the majority of European countries”, according to the Secretary of State for Health.

During this time of the pandemic, the issue of fake news has gained more relevance. This is a concept that in itself implies a degree of inaccuracy since “a piece of news, by definition, is not false” (Mesquita et al., 2019, p.1), although its narratives may be linked to less concrete information. We speak, then, of misinformation, disinformation or mal-information (Posetti et al., 2019, p.47).

In Portugal, and particularly during this time of the pandemic, it is crucial to foster critical thinking by resorting to reliable sites and the General-Directorate of Health (DGS). In this fight against fake news in Portugal, we highlight the partnership created between the DGS and the newsroom of Polígrafo-SIC. Its main goal is to analyse facts and ascertain the veracity of the information circulating among the population, drawing upon reliable scientific information and journalistic archives.

Consulting Polígrafo, we come across the following examples of these incorrect conceptions, which circulate on social media and are disseminated daily:

- 1 – The home recipe for aspirin, antibiotics and eucalyptus vaporisation is an effective treatment;
- 2 – Masks from China and India may be contaminated;
- 3 – Treatments with thermal waters;
- 4 – Asymptomatic infected people do not contaminate others.

All the above-mentioned statements were proven unsubstantiated and deceitful:

In the first case, there is no miraculous recipe to combat the virus, medicine such as antibiotics are not correct forms of treating COVID-19, neither are eucalyptus vaporisations or even the consumption of certain foodstuffs, such as lemons;

As regards the second case, there was, especially in May, information on imported masks that could be contaminated appeared in a video on YouTube, which was the product of manipulation, made to appear a legitimate warning from the WHO;

As for the third case, there is no scientific evidence that treatments with thermal waters are effective since it has been proven that the pH of food does not influence the situation of patients infected by this virus;

Concerning the fourth case, although it has been proven that some asymptomatic patients have a reduced ability to transmit the virus to other people, reality shows that it is not possible to generalise this to the entire population.

There will be many more situations like those mentioned above, which imply the need for critical thinking. According to Dominguez (2019, p. 137), “never before was it so urgent to think critically on the present controversial issues which challenge us as individuals, professionals and citizens of the 21<sup>st</sup> century”. Indeed, the difficulty “in assessing fake news, the lack of knowledge of our heuristics and our cognitive biases, among others, turn the development of Critical Thinking (CT) into a priority goal spanning all Higher Education Institutions (IES)”.

## **Slovenia**

As in other parts of the world, Slovenia was facing a large mass of false news during the pandemic of Covid-19. During the lockdown and quarantine, people were following the news even more regularly and were grasping for any new information about the virus, its source and various tricks on how to protect oneself from the virus.

Let us mention some false news circling mostly on the most popular social network. Many Slovenians were shocked by the false news that the USA army was preparing to invade the

whole of Europe, which was weakened by the virus. The truth was that NATO was carrying out an extensive military drill announced the previous October.

Another piece of news that turned out to be false was a picture of a train wagon with the sign “CORONA” on it. It turned out to be a photomontage.

During the pandemic’s peak, social media users started sharing false information about how to protect themselves from the virus. The post stated that you could eliminate the symptoms of Covid-19 in one night simply by drinking a cup of boiled garlic. The post was shared by over 1,600 Facebook users in Slovenia. The news was afterwards denied by the National Institute of Public Health in Slovenia. They stated that although garlic is healthy, there is absolutely no proof it can help fight the virus. Similarly, there was fake news that drinking water every 15 minutes will rinse the virus from the throat to your stomach, where it will be destroyed by stomach acid. Of course, this was soon dismantled as fake news.

There was much fake news about animals and the transfer of the virus from animals to humans. One of the Slovenian portals published fake news about massive numbers of dogs being abandoned in Slovenia during the pandemic because people were afraid that the dogs can transfer the virus to humans. This turned out to be untrue. This news was soon followed by the publication of fresh fake news, taken after a foreign media report about cats transferring Covid-19 to humans. The Veterinary Faculty of the University of Ljubljana acted immediately and published a statement that there was no evidence that cats can transmit the virus to humans.

During the period when the summer holidays began, hackers published another fake article, posing as one of the Slovenian journals. The majority of people from Slovenia go on holiday to the neighbouring country of Croatia. Therefore, many of them were concerned when fake news about Croatia closing its borders with Slovenia started circling in the media. The Slovenian Press Agency (STA) soon stated this news was fake, and many Slovenian people who had already gone to Croatia for their holidays could relax again.

It does seem that currently, the situation with fake news is getting a little better since there are several organisations and articles that are warning people to check what they read before they believe everything and share it onward.

## **Critical thinking and the specifics of teaching seniors**

There are two main threads for human intellectual development in later life. One of them is linked to life experience. People, who have experienced many intellectual challenges and had to face complicated problems, also usually experience positive ageing. And vice versa - people, who were only ordinary workers with no great intellectual challenges in their lives, face issues in understanding the world around them. Of course, in such situations, the beginning of the problem lies deep in the past. Nowadays, the situation is becoming worse and worse. In this case, we cannot do a lot because we have to accept that people who are not trained in any kind of intellectual work will not be ready for rethinking, analysing, comparing and deducing. The rule is very simple: as a retired person, somebody who is not trained in anything needs much more effort for success in learning than before.

The other problem depends on the development of society, civilisation, and techniques. Retired people also have to face problems of losses caused by the ageing process (including the loss of social contacts, which are a kind of source of verified information, according to the theory of constructivism). Thus, older people are squeezed by two different forces: losses caused by the ageing process and the rapid development of society. In the end, retired people have only themselves to rely on when seeking verified information about the world, society, human development, and everyday phenomena. They don't have a lot of opportunities to verify the truth, especially if they are not socially active. Gradually, the number of new phenomena grows so large that the world seems to be strange, incomprehensible, and far away.

One form of solution for loss and the information gap would appear to be well-prepared education for seniors. In the circumstances mentioned above, working with information is crucial for the process of making decisions in everyday life. It needs to be very carefully organised in a special way, so as not to harm anyone or crush stereotypes and help people change a worldview that is very often outdated. In such a case teaching "critical thinking" means showing what we can do with new information, how to update our knowledge, how to recognise facts, opinions, fake news and misinformation. Everything could help seniors to stay safe and prevent them from becoming a victim of impostors, swindlers, tricksters, cheaters and political populists. For such purpose, we need teachers and organisations that already have experience teaching seniors; new organisations ready to face the problem, well-prepared instructors/gerontologists/specialists in andragogy and adult education, and finally a

proper teaching program didactical proposition. Ideas and concepts proposed by partner organisations during the project were the first steps in composing appropriate material for the education of critical thinking.

## Best educational practices related to teaching seniors ‘critical thinking’



Country	Poland
1.	<b>Language:</b> Polish/English
2.	<b>Title:</b> “Be your own fact-checker, be closer to the truth”
3.	<b>Type of the practice:</b> course with elements of a workshop
4.	<b>Objectives of the workshop:</b>  We live in an information society, in which each of us receives a whole mass of diverse content which we unquestionably regard as being the truth. Our course came into being to help all interested and present how to deal with this pervasive information chaos. The assumption of the project is to emphasise the essence of critical thinking and reject the unconditional assimilation of received messages. We aim to present a means of thoroughly checking the validity of the given information and indicate what should be paid attention to when analysing information. The main objective of the proposed course is to sensitise participants to the importance of verifying the information contained on the Internet and present them with an uncomplicated recipe for doing so.

	<p><b>Specific objectives:</b></p> <ul style="list-style-type: none"> <li>• Demonstrate how to distinguish verified, correct, and true information.</li> <li>• Present features that can undermine the accuracy of information.</li> <li>• Show trustworthy Internet sources.</li> <li>• Pay attention to the importance of reading comprehension and carefully analysing sentences.</li> <li>• Review examples of fake news, false content, pseudoscientific sources.</li> </ul>
5.	<p><b>Authors:</b> Aleksandra Kudźma, Sylwia Kawa</p>
6.	<p><b>Target groups</b></p> <p>Seniors may feel misinformed while browsing news, social media, online newspapers, journals, and popular science portals. The course we have created is intended for seniors who want to broaden their knowledge in the field of verifying information posted on the Internet, and want to learn how to avoid false content often published in media.</p> <p>Characteristics of the group:</p> <ul style="list-style-type: none"> <li>• Age – 60 years and above;</li> <li>• Gender – for everyone;</li> <li>• Special requirements - seniors who have basic Internet skills and are in the field of computer literacy;</li> </ul> <p>Maximum number of participants – 20;</p>
7.	<p><b>Description of the practice:</b></p> <p>The recipients of our course are adult people, more precisely seniors. This group is particularly vulnerable in terms of a misunderstanding of some information. It is extremely important to outline to seniors how necessary verifying all pieces of information they receive is. One of the main objectives is to show them how much false information is around and how to verify it correctly so as not to duplicate it and</p>



	also to avoid unnecessary stress associated with it.
8.	<p><b>Course duration and follow-up activities:</b></p> <p>Approximate length of the course – 3 hours. The course is divided into 2 parts. Both of them are for a maximum of 1 hour and 15 minutes. There is a break for participants in between.</p>
9.	<p><b>Impact of the practice:</b></p> <ol style="list-style-type: none"> <li>1. The participants can verify that the information is false.</li> <li>2. They are aware of trusted sources of information.</li> <li>3. They can assess the risk of passing on such information.</li> </ol>



Country	Czech - Republic
1.	<b>Language:</b> Czech
2.	<b>Title:</b> “How our brains are misleading us and how not to be fooled”
3.	<b>Objectives of the training event/course/workshop:</b> <ul style="list-style-type: none"> <li>- to inform participants about cognitive biases and functioning of the brain (heuristics)</li> <li>- to demonstrate obvious biases that are happening to us</li> <li>- to inform that the world has improved in many ways</li> <li>- to explain what critical thinking is and create some exercises</li> </ul>
4.	<b>Type of the practice:</b> <i>workshop</i>
5.	<b>Initiator:</b> <i>Denisa Zábranská</i>
6.	<b>Target groups:</b> usually adults, can be (15-101+)

7.

**What do they do? How do they do it? For whom?**

-The workshop has three thematic phases.

**1. Description of cognitive biases and thinking fast and slow**

- a) explaining what thinking fast and slow means → fast thinking tends to have errors (cognitive biases)
- b) demonstrating cognitive biases wherever possible and then describing them (amount 7 +/- 2 ideally) - for example, Optimism bias - when people were projecting the Sydney Opera House, how much time and money did they expect it would need → And how long did it take? How much money did it cost? Let them guess. It was much more! - here, we can even show anchoring bias

**1. Assessing the test from *Factfulness***

- a) assessing the test from the book *Factfulness* (Hans Rosling)
- b) explaining the aim of this test and that almost everybody has low scores, even well-educated people. Also, there is one bias that probably distorted our thinking. Let them guess which one
- c) revealing the correct answers and asking about scores
- d) discussing the answers and explaining in detail about single cases (explaining the difference between extreme poverty and poverty, and that for us, it might seem the same, but there is a noticeable difference for people who live in these conditions)

**2. Explaining what critical thinking is**

- a) explaining what critical thinking is and differentiating it from criticism (negative point of view and searching for mistakes and errors)
- b) discussion about what people need to think more critically, how it happened
- c) stressing the importance of asking questions (even stupid ones) → this is the way we learn → it moves us forward to posing more questions → it is a process
- d) Finding controversial situations or statements and **practising formulating questions and suggesting more options of explanation** → for example, false causality (as eating ice cream causes drowning and [here](#) is a graph that shows it)

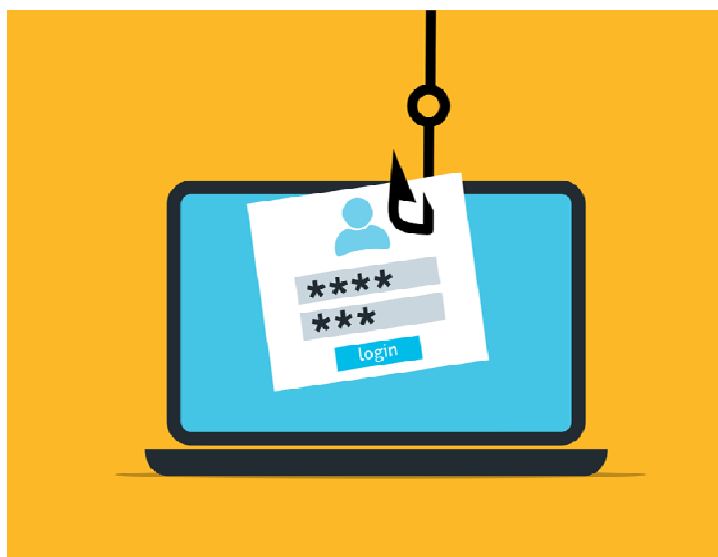
**IMPORTANT NOTE:** As some people in this course may feel inadequate and uneducated, it is important to say **that this is normal** and it is caused by the brain and

	<p>its functionality. <b>Everybody is capable of it</b>, and it is all right to have biases in unimportant decisions. The reason why we show it is to prevent important decisions coming from these biases.</p> <ul style="list-style-type: none"> <li>○ <b>Why do they do it? (needs)</b> - Curiosity: People frequently want to feel that they are right, and if they realise that something is wrong, it may cause openness and an eagerness to learn</li> <li>○ <b>Course duration &amp; follow-up activities, if any:</b> → one day workshop or two shorter (3 hours + 3hours)</li> </ul>
8.	<p><b>Necessary materials/resources</b></p> <ul style="list-style-type: none"> <li>- knowledge of these books (<i>Thinking fast and slow</i> - D. Kahneman, <i>Factfulness</i> - H. Rosling)</li> <li>- websites:</li> <li>- <a href="https://www.gapminder.org/">https://www.gapminder.org/</a></li> <li>- <a href="https://en.wikipedia.org/wiki/List_of_cognitive_biases">https://en.wikipedia.org/wiki/List_of_cognitive_biases</a></li> <li>- <a href="http://podcasts.ox.ac.uk/series/critical-reasoning-beginners">http://podcasts.ox.ac.uk/series/critical-reasoning-beginners</a></li> </ul>
9.	<p><b>Impact of the practice:</b></p> <ul style="list-style-type: none"> <li>- gaining knowledge and experience of cognitive biases</li> <li>- experiencing how our beliefs influence our guessing and predicting skills</li> <li>- understanding the role of critical thinking in human life</li> </ul>



<b>Country</b>	Austria
1.	<b>Title:</b> Entrepreneurship and Critical Thinking Skills in English Language Learning
2.	<b>Type of practice:</b> English Course
3.	<b>Objectives of the training:</b> Language acquisition takes into account the following competencies: entrepreneurial and critical thinking.
4.	<p><b>Description of the practice:</b></p> <p>Essentially, lessons are structured according to Bloom's taxonomy.  Remembering, Understanding, Applying, Analysing, Evaluating, Creating</p> <p>In particular, the following rules are implemented as teaching tips:</p> <ul style="list-style-type: none"> <li>• Start discussions with an open question</li> <li>• Give students time to think</li> <li>• Have them create a list of arguments for two completely opposite ideas</li> <li>• Help your students draw conclusions and make connections</li> <li>• Analyse statements by asking why more often afterwards</li> <li>• Help your students develop a sense of reliable information</li> <li>• Allow for other opinions</li> </ul> <p><u>Methodology</u></p> <p>Critical thinking can be taught in various ways in the classroom: Whether it is taught explicitly - in dedicated lessons and in the form of abstract principles - or in combination with specific subject content is not significant. Promotion is most effective when abstract principles are explicitly taught, trained, then illustrated,</p>

	<p>applied, and deepened using concrete topics.</p> <p>From (guided) class discussions to role-plays, from explicit teaching of general principles of critical thinking to close integration with specific subject content.</p>
5.	<b>Target group: adult learners</b>
6.	<b>Course duration &amp; follow-up activities, if any:</b> Courses are held at regular intervals according to demand
7.	<b>Necessary materials/resources:</b> <p>Flipchart</p> <p>Flipchart pens</p> <p>Working sheets</p> <p>PC</p> <p>Projector</p>
8.	<b>Impact of the practice:</b> <p>Students can learn not only cognitive tools but also, to some extent, a critical stance in the process. Much of the available research on critical thinking has come from the English-speaking world. However, for the German-speaking school context, it provides solid evidence on how teachers can support their students in questioning issues and developing independent arguments in the classroom.</p>
9.	<b>Initiator / trainer</b> <p>Organization: Akademie für Politische Bildung und demokratiefördernde Maßnahmen</p> <p>Facilitator: Hauser Petra</p>
10.	<b>Website link:</b> <p><a href="https://www.pb-akademie.at/">ECT Skills &amp; English Language Learning - Akademie für Politische Bildung und demokratiefördernde Maßnahmen (pb-akademie.at)</a></p>
11.	<b>Social media links:</b> <p><a href="#">Erasmus+ ECT Skills &amp; English Language Learning   Facebook</a></p>



Country /organisation	Poland / Fundacja Pro Scientia Publica
1.	<b>Title: Phishing</b> <ul style="list-style-type: none"> <li>• Spanish prisoner/Nigerian Scam</li> <li>• Mailing</li> <li>• Social Networks (fake profiles)</li> <li>• Stealing the Identity of a person or an institution</li> </ul>
2.	<b>Type of the practice:</b> Workshop
3.	<b>Objectives of the training:</b> <b>Main goal</b> - to present a given problem to a selected target group, i.e. seniors, who may be the most sensitive group of users on the Internet, relating to a given scam method. <b>Specific objectives:</b> <ul style="list-style-type: none"> <li>• Increasing awareness about current processes as well as possible threats while navigating the virtual network.</li> <li>• To explain phishing schemes to the participants, i.e. to show how they work.</li> <li>• Presentation of selected types of phishing.</li> <li>• Presentation of techniques for preventing phishing</li> </ul>
4.	<b>Description of the practice:</b> The course is dedicated to adults with the theme of “Phishing”. In the beginning, participants are acquainted with the content of the course, then, important

	information on the main topic is presented. After the theoretical part, the participants take part in group work, where they can check and use the knowledge acquired. In the end, there is a time for discussion and summary of the course.
5.	<b>Target group:</b> Seniors
6.	<b>Course duration and follow-up activities:</b> The whole duration of classes - 90 minutes: <ul style="list-style-type: none"> <li>• Organizational and preparation activities - 5 min.</li> <li>• Integration - 5 min.</li> <li>• Introduction to the workshop content - 10 min.</li> <li>• Introduction to the topic of the class and problem definition - 10 min.</li> <li>• Work in groups - 15 min.</li> <li>• Presentation of selected types of phishing - 10 min.</li> <li>• Work in groups - 10 min.</li> <li>• Presentation of techniques protecting against phishing - 15 min.</li> <li>• Summary - 10 min.</li> </ul>
7.	<b>Necessary materials/resources:</b> <ul style="list-style-type: none"> <li>• access to a computer with an internet connection, projector</li> <li>• flipchart, highlighters</li> <li>• posters, notebooks, writing tools</li> </ul>
8.	<b>Impact of the practice:</b> After completing the course, participants acquire the necessary knowledge to detect and avoid phishing attacks.
9.	<b>Initiator/trainer:</b> Magdalena Jaworska (Fundacja Pro Scientia Publica).
10.	<b>Website link:</b> <a href="http://www.cybernetsecurityforseniors.eu">http://www.cybernetsecurityforseniors.eu</a>
11.	<b>Social media links:</b> <a href="https://www.facebook.com/pg/nmfcss/">https://www.facebook.com/pg/nmfcss/</a>





Country /organisation		Portugal / COFAC Unisseixal
1.	<b>Title: Psychology-activities during the pandemic</b>	
2.	<b>Type of the practice:</b> <i>subject of senior university</i>	
3.	<p><b>Objectives of the training:</b></p> <p>During the pandemic, the Psychology Service of Casa do Educador &amp; Unisseixal continues to perform telework functions, serving Unisseixal students and members of Cesviver.</p> <p>There are currently 5 groups of students, mediated by psychologists Dr Vítor Vitorino and Fiona Sofia, who carry out video conferences via Messenger on Mondays, Wednesdays and Fridays, and whose content is published on the Facebook Page: “Unisseixal – Psicologia para A healthy life”. This dynamic aims to promote well-being and conviviality through sharing; the strengthening of interpersonal relationships; stimulation of cognitive functions, namely attention and short- and long-term memory; the development of empowerment, providing participants with a more active and autonomous role; all of which promotes an improvement in the quality of life, as well as a healthier and more active ageing process.</p>	
4.	<p><b>Description of the practice:</b></p> <p>Consultations for support and psychological follow-up occur over the phone or by video call via Messenger or WhatsApp.</p> <p>Telephone contacts have been made with students from Unisseixal psychology classes and with members of Cesviver, in order to provide psychological support if necessary</p>	

and, if possible, to meet the needs expressed by the students.

It is worth mentioning that studies indicate that cognitive intervention programs are effective in stabilising or improving cognitive deficit and that they promote, in this way, maintenance or an increase in the person's cognitive performance and autonomy, according to the characteristics of the user/client and if any, the injury.

This program is a tool that allows the implementation of cognitive training plans online, supervised and prescribed, in this case, by the psychologist, and which are conducted according to people's needs.

In this regard, it is important to mention that there are several types of exercises and that they are organised by cognitive function (attention, memory, executive functioning, language, constructive ability and calculation, and those which allow the evolution or regression of the level of difficulty, depending on the user/customer performance).

From the various sessions of the activity, we present some specific examples made by video: Ms Adélia Serralha shared an excerpt from Helena Sacadura Cabral's book: "my choices", referring to Happiness, and each participant related a sentence or a word, which they had heard, thus deepening the impact that this excerpt had on each member of the group.

Mrs Maria Alexandrina shared a poem by Manuel Alegre "*Lisboa still*", which was discussed in the group.

The sessions began with sharing excerpts from books and poetry brought by the participants, exploring each one and addressing some pertinent themes.

Ms Adélia Serralha read a text referring to change, taken from the book: "*How to create a new self*".

Mrs Emília Cruz shared an excerpt taken from the Bible, and Mrs Maria Justo recited the poem by Fernando Pessoa: "*the crossing time*".

Next, a theme relating to "fear of leaving the house and the need to leave the house even for 5 minutes" was addressed. Strategies for leaving the house on time but safely so as not to have a panic attack were discussed, with a way to combat any anxiety-depressive symptomatology arising from the quarantine.

The advantages of quarantine were discussed in the group in order to reorganise the

	<p>mind towards a Positive Focus. Benefits mentioned by the participants included: more solidarity, opportunity to practice pleasurable activities, such as reading a book and cooking with a partner, an improvement in nutrition, a strengthening of family and social relationships at home and by video calling, extra motivation to adhere to new technologies with a focus on overcoming difficulties, learning and improving the laptop domain, as well as a family reorganisation with regard to the children's telework.</p> <p>Ms Adélia Serralha, as agreed, re-read the text: <i>"How to face the changes"</i> for the colleagues who were not present on the past 4-17-20.</p> <p>Mrs Maria Justo presented us with a magnificent excerpt from the book: <i>"The Little Prince"</i>, which relates how we all leave a little of ourselves in others and vice versa.</p> <p>Mrs Lurdes C. Neves Moreira recited a poem by Machado de Assis referring to Friendship.</p> <p>Mrs. Maria Alexandrina recited Manuel Alegre's poem: <i>"Lisboa still"</i>.</p> <p>Ms Sebastiana Romana brought us an excerpt from the book: <i>"The Spirit Diet"</i>, which addressed the importance of seeking well-being, and Mrs Ana Maria Farinha read an excerpt from the book: <i>"The goddess remains"</i>, which referred to the importance of the capacity to love.</p> <p>The groups deepened each text read and listened carefully, in which each participant gave their opinion.</p> <p>Mrs Isabel Lopes gave her testimony of how she managed to fight the fear she was feeling about leaving the house, noting that it was important to have put into practice the strategies discussed in the videoconference on 17/4/2020. That way, she felt safe and was able to savour the short time she went out to the street safely, dealing with the group that had already made an attempt before April 17 but had a panic attack at home and was unable to leave.</p>
5.	<b>Target group: + 55</b>
6.	<b>Course duration &amp; follow-up activities, if any:</b> during the year and following.
7.	<b>Necessary materials/resources:</b> computer and Internet
8.	<p><b>Impact of the practice:</b></p> <p>The great advantage that students have when carrying out these sessions at home, on their PC due to the confinement that the Covid-19 pandemic generated in all of our</p>

lives, is that they can do the cognitive training session without a scheduled time, the times as they wish, daily, alone and/or as a family, being able to compare their results at the end of the session.

Currently, cognitive training sessions through Cogweb are being carried out by some students from Unisseixal and members of Cesviver who requested this type of service, which is initiating an overcoming of difficulties generated by various blocking beliefs which people had in relation to technology; thus promoting an increase in confidence, well-being, autonomy, motivation and self-esteem.

This encourages people to keep living, pay attention to their surroundings, and develop their critical thinking in times of pandemic.

**Impact of the practice according to Testimonies of the two Delegates:**

This encourages people to keep living, pay attention to their surroundings, and develop their critical thinking in times of pandemic.

**CRITICAL THOUGHT ABOUT THE CONSEQUENCES OF THE PANDEMIC REGARDING THE MENTAL HEALTH OF THE ELDERLY.**

This global pandemic has caught the entire world off guard.

It was becoming clear that a lot would change, especially mentalities.

It was soon realised that the older age group would be one of the most affected due to their limitations concerning mental and physical health.

The vulnerability of these groups was aggravated by social isolation, deprivation of freedom, lack of affection. We were prevented from hugging, kissing, visiting, accompanying the sick and the dead, and it made us think: Who are we? What is happening? Where will this take us?

In the first phase - the ignorance of how we would get answers for a solution that would give us back everything we had lost: faith and hope were our companions, who helped us to face a new reality that nothing else would be as it was before. We learned to be resilient and to adapt to difficult situations, such as new technologies that were more proof of overcoming difficulties.

How to face the new reality

New ways of living together during full lockdown are sought. Video conferences become the link between families, friends and work or social groups as a means of fighting isolation and keeping the brain active and stimulated.

Integrated within the academic year of the Senior University of Seixal, several groups of video conferences were created, which took place during the 3 months of lockdown, from April to June 2020, for students aged between 60 and 80. These sessions, in which I participated, worked as a way of minimising isolation, occupying time, creating and activating critical thinking, exchanging ideas and sharing life stories, poems - everyone was invited to contribute. Several cognitive stimulation techniques were used through exercises performed to exercise memory. Also, the use of Portuguese Sign Language as a way to stimulate cognitive functions associated with the flexibility of hands, so physical exercise was part of it.

All students who participated in these initiatives highlighted their importance in such a troubled period of their lives and how this psychological support helped to minimise the damage caused by the pandemic.

Critical thinking is fundamental, it allows us to improve and accomplish what really matters.

In overcoming all adversities we learn that physical and mental health is our greatest asset and must be preserved.

Adelia Serralha Student No. 1881 at Unisseixal

Experience - lived during the lockdown period as a student of “Psychology for a healthy life” at Unisseixal.

In a time full of fears, doubts and prohibitions, we were kept at home, without classes, without socialising or affection. A fast-moving virus took over the world and made the removal of everything and everyone until a solution could be found to contain it. No family, no friends, no public services... just the order to stay at home. Life was threatened, and our sanity was significantly weakened.

In this context, the psychology professors proposed a solution based on the only possible alternative, which was to use the Internet to “meet” virtually.

Professor Sofia, an intern under the guidance of Professor Vitor Vitorino, was available

to organise and coordinate communications via “Messenger”. We realised that it would be an excellent way to break isolation, share ideas, learn in a group, and prevent discouragement, fear and immobility.

So it happened:

- We saw each other, heard each other and smiled;
- We shared strategies to survive this physical and psychological pandemic;
- We prevented depression from taking hold;
- We learned sign language with Adélia;
- We wrote and read poetry;
- We shared readings;
- We talked about books and presented their contents to the group;
- We exchanged recipes;
- We presented suggestions for making our masks;
- We talked about resilience, gratitude, healthy eating and the power of our minds in implementing strategies for a peaceful and healthy life.
- We developed critical thinking and the capacity for self-reflection as a way to improve our way of living.
- We did cognitive training through a program that stimulated the senses and the ability to concentrate.

Conclusion:

It was a positive pleasure to participate in this program that allowed us to think, reflect on life’s essential issues, and verbalise ideas, concepts, and feelings.

The diversity of contributions allowed us to maintain our focus on positive, assertive and personal growth practices.

The hands were exercised in learning “Sign Language”, and concentration was activated because we were committed to learning and doing it well.

In this dynamic exchange of knowledge and thoughts, we gained well-being, confidence and improved quality of life.

This innovative experience made us come out of our cocoon of solitude and made us realise that going out of ourselves to meet others is the best education in keeping our

	thinking active, organised and guided. Testimony of Maria Sebastiana Miguel Romana
9.	<b>Initiator / trainer</b>  Organization: UNISEIXAL  Facilitator: Vitor Vitorino and Fiona Sofia
C	<b>Website link:</b>  <ul style="list-style-type: none"> <li>• <a href="https://psisaudavel.blogs.unisseixal.org/2020/05/">https://psisaudavel.blogs.unisseixal.org/2020/05/</a></li> <li>• <a href="https://www.cogweb.pt/">https://www.cogweb.pt/</a></li> </ul>
11.	<b>Social media links:</b>  <a href="https://www.facebook.com/unisseixal.senior">https://www.facebook.com/unisseixal.senior</a>

## Lithuania

Case study: Magazine 60+

Free magazine for seniors “60 plus”

The magazine analyses a very wide circle of topics relevant to older people: health, leisure, fashion, conversations with interesting people, food, etc. “I want to convince and inspire all elderly people that old age is not just about sitting at home and looking out of the window. This is the second youth, or maybe even adolescence or childhood!” - says Laura Balčiūtė, the creator and founder of the magazine.

The magazine seeks to introduce seniors to various activities and activities that could brighten their lives. It describes travels around Lithuania and presents useful information about various health disorders. There are informative articles in which specialists answer questions with their knowledge: doctors, lecturers, coaches, etc. It seeks to inspire seniors to try something new and learn useful information directly from professionals.

Launched in 2017, the magazine was a great success. This is the first magazine in Lithuania dedicated to this particular audience.

The founder of the magazine says that the idea for this project was not born out of commercial considerations, but out of great love and respect for her grandparents Jadvyga and Jonas. Thanks to them, she claims to realise that objects are not the things that need to be

respected and valued, but the person that needs to be cared for by others. When she started to move in this direction - to communicate with other elderly people and find out what they were missing and what they needed, Laura says that she felt a great fullness of life. Communication gradually inspired the release of a free magazine specifically for seniors. Magazine 60+ is designed to motivate seniors to continue living actively and enjoy life continuously. After all, life does not end after retirement; it is the most beautiful time when you can dedicate it only to yourself. She is also very keen to change people's thinking that older people only care about health because they are just as interested in innovation and are very curious as younger are.

While creating the project "60+" and thinking about publishing the magazine, Laura says she did not set herself huge tasks - this activity was simply inspired by the great love and gratitude of her grandparents, which, unfortunately, she no longer has. "For everything, I got from them: for love, for understanding the values of life, I wanted to create something useful for them as a thank you to the elderly. I thought it would be interesting to gather in one place the offers of various companies, discounts and benefits provided to them," L. Balčiūtė recalls.

The audience of elderly people is very different. "Some are still quite strong, healthy, hard-working, delaying their exit to earned rest for a long time, full of enthusiasm and ideas. Others are already noticeably tired, albeit working, but forced to wait for the so-called earned comfort due to the extended retirement age and frustrated having lost the joy of life. And if we add that "plus",... it's even more diverse. Often, a person of such a respectable age lives alone, having already lost their life partner and loved ones. So, you are likely to feel lonely," says the publisher. How the magazine contributes to critical thinking and the reduction of stereotypes

The content of the magazine is aimed exclusively at elderly people. The publishers aim to dispel stereotypes and show that at this stage of life, everyone is able to live a full life, full of various activities, communication with other people and joy of living. The authors aim to show that life is beautiful and full of different colours and that the joy of life is not only in youth but also in older age.

"Meetings, conversations, letters with various issues relevant to people of this age revealed another issue, that excessive attention to youth (let's say, the cult of youth) in our country has pushed aside many things relevant to the older generation. And the reality is quite different: our society is quite aged, perhaps due to the excessive emigration of young people and



middle-aged people. Therefore, topics regarding life are today focussed among the older, not younger generation,” says Laura Balčiūtė, the author and publisher of the magazine. “All private initiatives which try to close the gaps in the approach to the older generation, to gather like-minded people, to look for more and more attractive ideas that help to paint the lives of our seniors in new colours, to give their everyday life a sense of fullness, and to learn from them the wisdom of life, should be welcomed. It is invaluable,” says L. Balčiūtė.

The magazine’s publisher also says that by organising various activities for seniors (such as Cinema 60 Plus, etc.), she contributes to reducing other stereotypes about elderly people. Such people are traditionally imagined as full of disease, constantly in a bad mood, dissatisfied, unhappy, and “lacking style”.

But looking at how many different organisations, clubs, and communities they have created, this inactivity is just a myth. On the contrary, they are active and interested in many different things. And such a specialised publication for this audience helps spread the message about the vitality of this age group, the desire to enjoy life and engage in the various activities that interest them.

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prepared by dr Ruta Klimasauskiene, Alfa idėjos ir technologijos, the partner in ERASMUS+ programme Project CRTITHINK.

## Conclusions

Presenting and comparing different concepts of educational work with seniors and raising their ability for critical thinking has brought added value to the project. Project partners from Austria, the Czech Republic, and Poland are directly focused on critical thinking courses. There is a clearly defined concept of 'critical thinking in teaching content directly. Courses from Lithuania and Portugal are connected more with creativity, which is an ability strictly connected with critical thinking. It means that every course which is focused on creativity should, at the same time, raise the ability for critical thinking.

Thanks to the various propositions of courses elaborated by organisations with the tremendous experience we have:

- many perspectives on the education of seniors in critical thinking,
- clear concepts of lessons,
- teaching material.

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# Appendix

Denisa Zábranská

## *Critical Thinking as an important skill of our time*

(published on EPAL platform on February 3 2020)

### **What is critical thinking?**

Many people think that critical thinking is related to criticism in the sense of a word to express disapproval of someone or something, but it is rather something else. The word ‘critical’ is related to the greek word κριτικός (kritikós, “of or for judging, able to discern”). Critical thinking is the skill of thinking and reasoning in which thoughts are assessed for their clarity, accuracy, relevance and logicalness. It does not include accepting all arguments and conclusions which may occur. During this process, it is important to seek more information, to question the source of it and one’s own beliefs, and be open to alternative possibilities and evidence that does not support our preferred opinions.

Although the collocation ‘critical thinking’ has its roots in the mid-late 20th century, the concept and its idea can be traced back to Ancient Greece about 2,500 years ago. One of the leading critical thinkers was Socrates. Many know his method of questioning, sometimes known as “Socratic Questioning” and is still valued as one of the best critical thinking teaching strategies. He also promoted the importance of seeking evidence, examining reasoning and assumptions, and analysing not just what is said but also who said it, and how it corresponds to reality.

Briefly then, critical thinking is self-guided rational thinking which attempts to reason at the highest level of quality. It involves checking one’s own opinions and purifying them from egocentric tendencies. It is important to try to avoid mistakes in reasoning, prejudices, biases, distortions and other fallacies caused by human irrationality.

And what are the known fallacies? There are plenty of them and they are collectively called cognitive bias. Some are general, more common, as confirmation bias, which is a tendency to process and prefer information consistent with one’s existing beliefs. Others are specific, for instance, the Forer Effect, which means accepting vague and very general descriptions of

personality as unique and perfectly fitting. Also, it is worth remembering that there are argumentation fallacies, which might seem logical, but are in fact not.

### **Our Erasmus+ project CriThink**

In November 2020 in Portugal, we had the first meeting of our international Erasmus+ project **CriThink** ([www.crithink.eu](http://www.crithink.eu)), in which we will share our best practices and discuss other ways for teaching critical thinking to adult learners. This project is attended by people from five different European countries and lasts for two years. Education experts from the Czech Republic, Poland, Austria, Slovenia and Portugal will collaborate in researching a new perspective on critical thinking.

We are looking forward to discussing and sharing our understanding of critical thinking in our countries, as well as the role of history, society etc. in forming this point of view. We will immerse ourselves in this topic to uncover interesting new information and share our acquired knowledge on our website [crithink.eu](http://crithink.eu). We, therefore, invite you all to read the results of our research.

The primary target group of the project is seniors 55+, who are unable to adequately process large amounts of information coming from the Internet. The secondary target group is the families of seniors, especially grandchildren (young children), who are also a very vulnerable group due to the perception of them in the world.

### **And why is it important to train critical thinking for adult learners?**

Some people are already convinced that they already know how to ‘think critically’ because they have common sense. It could be said that common sense is the first step on an imaginary staircase, and it is important to be in touch with reality and continue further to develop critical thinking. We think that this is important nowadays because we have access to an enormous amount of information and we have to choose good sources.

(Source: EPALÉ [https://epale.ec.europa.eu/en/content/critical-thinking-important-skill-our-time?fbclid=IwAR02UMI4GDuajWtiAh3NWMqiTENg-Wi\\_2YK8wZoqWe4-KMEgAiMXHprYY0](https://epale.ec.europa.eu/en/content/critical-thinking-important-skill-our-time?fbclid=IwAR02UMI4GDuajWtiAh3NWMqiTENg-Wi_2YK8wZoqWe4-KMEgAiMXHprYY0))

Mojca VUKOVIČ

**ERASMUS + PROJECT CRITHINK: FAKE NEWS DURING THE COVID-19 PANDEMIC**

(published on EPALE platform on February 3 2020)

The Erasmus+ project CriThink, which includes partners from the Czech Republic, Portugal, Poland, Austria, Lithuania and Slovenia, addresses the topic of critical thinking so that when the partners noticed a high amount of fake news in the media during the Covid-19 Pandemic, they decided to carry out some research on this topic and compare the results obtained in the various partner countries. The results showed a large increase in fake news in all project partner countries, some of which we will present in this article. In Austria, for example, there was a high amount of fake news circulating in various Whatsapp groups, one of them in the form of a voice message, which claimed was made that the University of Vienna was advising people against taking certain painkillers. The claim was very quickly denied by the University, but by then the news had already been shared numerous times. In the Czech Republic, one of the biggest fake news stories was that IBUPROFEN (a painkiller) worsens the course of the disease. This information has been denied several times by the State Office for Drug Control of the Czech Republic (SUKL) and the Ministry of Health. In Lithuania, there was a lot of stress and anxiety among the people as well as a lot of misleading information regarding the spread of the virus, the effectiveness of mask-wearing, contact with people, etc. There was a lot of controversial information from different sources about the effectiveness of masks, especially because at the beginning of the Corona crisis the country experienced the lack of masks, and the communication from the government was mainly about the importance of washing hands. Later on, wearing masks became obligatory, but for many people, it was difficult to adapt to this situation as they were previously convinced of a completely different approach. In Portugal, they detected many cases of fake news, the most popular ones being those about treatments with thermal waters, about how asymptomatic infected people do not contaminate others and how masks from China and India may be contaminated. There was much fake news claiming that a home recipe for aspirin, antibiotics and eucalyptus vaporisation is an effective treatment. Similar fake news appeared in Slovenia, where it was stated that you can eliminate the symptoms of Covid-19 in one night simply by drinking a cup of boiled garlic. In Poland, the fake news regarding the prevention of infection

was drinking pure alcohol. All the above-mentioned statements were proven to be unsubstantiated and deceitful. In Slovenia, for example, many people were shocked about the false news that the USA army was preparing to invade the whole of Europe, which had been weakened by the virus. The truth was that NATO was carrying out an extensive military drill which was announced the previous October. Poland had many cases of fake news regarding pets and the Internet was full of pictures of cats and dogs which had been abandoned by their owners who feared being infected with Covid-19 through them. The World Health Organisation reported that so far no scientific evidence has been found that pets, such as cats and dogs, could be infected with the virus, meaning that they could not pass it on to humans – however, it was recommended to wash your hands after being in contact with an animal. Countries have reacted variously in their fight against fake news. In Austria, the government set up a “digital crisis management team”, which was in charge of identifying and flagging false reports about the Vorona virus. In the first week alone, around 150 fake news items were discovered. Some countries have associations that deal with fake use. In Austria, for example, an association for education about internet abuse - Mimikama, has been active in this area since 2011. In Portugal, a partnership was created between the DGS and the newsroom of Polígrafo-SIC to combat the problem with fake news. Its main goal is to analyse facts and ascertain the veracity of the information circulating among the population, drawing upon reliable scientific information and journalistic archives. In Slovenia, some portals are trying to eliminate the quantity and effect of fake news, including the Center for Investigative Journalism in the Adriatic Region, and the website <https://neja.sta.si/> where people can find articles about fake news. Many countries have recognised the importance of seeking advice from those who are specialised in this scientific field. In Poland, for example, Dr Paweł Grzesiowski, President of the Board of the Foundation Institute for Infection Prevention and an expert in immunology and infection therapy who, in one of his interviews, gave key information about the speculation concerning how long the virus stays on the package, and whether it was infected in some way during packaging. The situation with fake news and its prevention is getting better, but still, a lot has to be done to educate and inform people about how to recognise fake news and how to check whether the news they are reading is credible or not.

(Source: <https://epale.ec.europa.eu/en/blog/erasmus-project-crithink-fake-news-during-covid-19-pandemic> )

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### **Overview Crithink Books**

(published on EPALE on March 11 2021)

In 1995, José Cardoso Pires suffered a stroke. This changed his life, due to severe memory loss. This period he designated as “white death”, which led him to be “that other I am”. The testimony that José Cardoso Pires wrote - *The Slow Waltz*, is a very important reflection on the need we have for memory in order to be what we are now. The loss of memory is equivalent to each of us losing ourselves. The abyss of forgetfulness throws us into a non-place, into a relationship with the dispossessed world, with nothing left to wait for. The slow waltz marks the recovery process, referring to the slowness that it takes to recover the memory, and taking from our eyes the blindfold that prevents us from understanding everyday life. That, what was me, makes “the other me” and prevents us from being able to “hunt” the apprehension of the real. The return to life is dependent on the recovery of memory. José Cardoso Pires’ book draws our attention to the importance of memory.

Now it turns out that the frenetic way of life of today leads us through a different process to the loss of memory. This new pathology places us in the chaotic situation of memory loss, as pointed out by José Cardoso Pires.

The world revolves at a dizzying speed and demands from us an equally rapid response. The rapid system is more tied to automatic and unconscious responses. Quick thinking does not look to the past, does not consider history, does not have time to reflect on them. Therefore, we consider that Maffei (2018) can make a strong contribution. In this sense, critical thinking can only be truly critical if it is critical in time. Critical thinking cannot be abstracted from time. The intelligibility of critical thinking has to extend into the flow of duration. Maffei (2019, p.122) tells us that looking is linked to quick thinking. Seeing is slow thinking. It is seen with the mind and not with the eyes. We see with the words of history that are in our memory. Without this, we suffer from prosopagnosia. Critical thinking becomes a duty of reason itself.

The fast-thinking system is subject to errors. The slow system is more reliable. Maffei (2018, p.62) tells us that “The slow system has complex mechanisms that encompass relationships



between cortical and subcortical areas, mechanisms that are still largely unknown, involving memory, attention, will...” On the other hand, the slow system influences the fast system, relative to the modulation of its speed and the projection of information.

Quick thinking does not look to the past or the future, does not consider history, does not have time to reflect on them. Slow thinking is a heavy thought of carrying that drags the burden of memory, the weight of doubt and the uncertainties of reasoning (Mafesi, 2018, p.91). In this sense, we consider that critical thinking cannot fall into the error of memory loss, proper to rapid thinking.

In a more didactic perspective, Peter Cokan is referred to, who presents a guide to the development of intellectual skills. Cokan uses the most modern methods and discoveries of scientists in his work, as well as his own experience gained through formal and informal education.

He uses critical thinking in his personal and professional work (a wide range of tasks).

The manual gives young people the opportunity to teach themselves and other young people how to act and think critically. It helps the reader get a broad view in the area of critical thinking and helps him to distinguish between critical thinking and criticism.

Reading the manual will help the reader to become familiar with the skills of critical thinking. It covers areas such as awareness, analysis and evaluation of information. It presents basic strategies for more successful learning and critical thinking, which allow learning and thinking at a higher level and allows the individual clearer thinking for more efficient problem-solving.

For his part, Robert Cialdini praises critical thinking as the broadest form of thinking. In the perspective of this group, every kind of independent thinking, rethinking, Intersystem thinking, analysis, reasoning, and source comparison can be a form and/or part of critical thinking.

It is considered that the work of Robert Cialdini is a great influence on critical thinking. This reference works in the opposite direction from the perspective presented by Maffei. Somehow the shortcuts are praised because we need to make very quick decisions in our life. It is considered that in many situations this type of response is very important because we gain

time for other activities. The author describes 6 basic rules of social influence: reciprocity, commitment and consistency, social proof, taste, authority, scarcity. All rules are defined and described in connection with our everyday examples and with a scientific explanation of social psychology.

A recommended book is *Factfulness* by Hans Rosling because it updates our knowledge and fights against prejudice. The book contains a short test that has helped many people. In addition, the author praises critical thinking in the book and shows good examples of his life that helped in the situation or even saved his life.

The book is recommended because it changed the life of the author. The book gave him enthusiasm and made him feel that he is working to improve himself and the world.

Another recommended book is Harry Potter, a fun fiction book. It is considered special because Harry explains many principles of science and experiments in the book in a very simple way.

Stelle Cotrell's book, *Critical Thinking Skills*, recognised as the leading specialist in study skills, serves as an essential guide for students of all disciplines and levels.

Chapter 6 "Reading between the lines" stands out. This chapter offers opportunities to Recognise assumptions underlying arguments and identify hidden assumptions; Evaluate when an argument is probable and based on false premises; Understand what an "implicit argument" means and recognise such arguments when they occur; understand "denoted and connotated" what mean. and be able to identify them within an argument.

This book includes many exercises for students. Other chapters considered interesting are: What are critical thinking and critical reflection

(The material was processed: Brás José, Carmo António, Neves Maria, Ramilo Teresa, from Lusofona University, source:

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