

The promotion of media literacy under the prevention of fake news and the current status of media literacy education in Taiwan

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Abstract

The United Nations Education Scientific and Cultural Organization (UNESCO) actively discusses the improvement of cognition through media literacy and the criticism of news and solves the seriousness of false information and fake news. A Swedish study on the problem of global fake news pointed out that Taiwan is the world's most attacked by fake news and information from foreign countries (V-Dem Institute, 2019). No matter what type of false information and fake news is used, it will harm society (Marin Dell. 2019). The proliferation of fake news has recently attracted attention to the topic of "cognition" in Taiwan. News media issue setting has the characteristics of mirror effect, which means that the public will respond to the operation of news issues, especially the reliance on the "mirror" model of media effects (Lutz Erbring, Edie N. Goldenberg and Arthur H. Miller, 1980). In order to solve the problem of deliberately mishandling media issues, which in turn affects the perception of the audience, issue education, and cognitive theories develop the ability to use textual thinking, problem-solving, and knowledge construction. A reader with reading literacy should develop a willingness to read, and more importantly, develop the ability to retrieve texts, obtain information, and interpret information to solve problems (National Education Institute, 2017). Cognitive education has become the core idea of Taiwan's promotion of news literacy education. This article will discuss the cognitive theory of Potter's media literacy (Potter, W. J. 2004), using Potter's model to structure "cognitive needs", "media control points" and "Media Knowledge Structure" understands the current status and feasibility of using cognitive theory in the development of news literacy courses in various countries around the world and Taiwan. Analyze, and finally explore the findings.

Keywords: media literacy, cognitive theory, topic education, inductive analysis.

1.Introduction

The 19th-century newspaper tycoons Hirst and Pulitzer used the media to create issues and influence the lives of all mankind with the power of influencing public opinion. They used misleading and sensational headlines to promote newspapers. It can be said that misinformation and The beginning of fake news (Michelle Luhtala, Jacquelyn Whiting, 2018).In 2020, due to the Covid-19 epidemic, more than 510 million students in 31 countries around the world are facing school closures and adopting online learning measures (United Nations Cultural Organization, 2021). When students all over the world are learning through digital media in large numbers, a large number of news topics and false information continue to be produced and spread through the media without far-reaching boundaries and then impact the international community. The most common situation in the news media's transmission of messages is that they are distorted and deliberately distorted, attracting people's attention and affecting perceptions in the form of issues. The spread of errors related to the epidemic or maliciously created false messages is called information contagious diseases, which have a considerable impact on epidemic prevention. Big impact (WHO, 2020).

News overload and chaos have become a common problem all over the world. There are much false information and fake news hidden in a large number of topics and information, making it difficult to distinguish right from wrong (Blair, Ann. M.,2011). News issues have the characteristics of controlling people's thoughts. News media is regarded as interest groups pursuing issues. Rulers use the news to integrate the governed people (Bill & Tom, 2001). International news survey research shows that the positive and negative content of the report will affect the overall perception of the public, and thus the importance of the setting of news topics. The more positive reports from the supporting media, the more likely it is that the interviewee believes that the country is vital to the interests of the United States. The more negative reports a country receives, the more likely the interviewee is to have a negative view of the country (Wayne Wanta, Guy Golan. 2004).

To combat false information, scholars who study media literacy explore three main issues. The first question: What is the media? The second question: Scholars describe media literacy as skills and knowledge from a very broad perspective. The third question: for news media cognition, critical thinking skills to distinguish media positions and information from true to false, and the cognitive theory of news literacy (Potter, 2010). How to describe the psychological process of people challenging media information. Potter provides a set of knowledge based on seven specific skills (analysis, evaluation, grouping, induction, deduction, synthesis and abstraction) and five sets of knowledge structures (media effects, media content, media industry, real world and self). News literacy is very important. Improving cognitive ability is recognized by educators as the primary core of identifying fake news. Countries all over the world have realized the importance and urgency of news literacy as a citizen's literacy. Furthermore,as the concept "Sustainable Development or Sustainability" has been one of the world's hottest topics, education is seen as an important way to achieve sustainable development (Du, Guan, & Hsieh, 2020).In accordance with the Sustainable Education Goal Project in the Sustainable Development Goals, the United Nations improves the ability of "media literacy" through education, and helps people learn and improve the knowledge and skills necessary for news literacy in an environment full of fake news, In line with the meaning of sustainable education, puts forward the five laws of media and information literacy. The strategic goal is to define information literacy and media literacy as the knowledge, skills and attitudes required for life and work in the 21st century (UNESCO, 2018).

2. Definition and background of global fake news

2.1 Definition of fake news

The news is not true and has a standpoint, Thomas. When Thomas Jefferson was the President of the United States, he said: "People who never read newspapers are more knowledgeable than people who read newspapers." Jefferson believed that anything printed in newspapers was not credible. His position is that "people who know nothing are closer to the truth than those who are full of lies and mistakes" (Jensen, 1997; Potter, W. J., 2019). What are fake news and alternative facts? The difference in definitions between the two is important, indicating that different people use fake news and substitute facts in slightly different ways. No matter what type of false information is used, fake news and alternative facts will harm society, and the skills cultivated by media literacy are the only way to prevent its spread (Marin, 2019). Politics and the media are closely related, and world leaders have long realized their capabilities and may need to control the truth (Michelle&Jacquelyn, 2018). "Fake news" used to be defined as an unprofessional or untrue news story. The characteristics of these fake news stories are untrue, not the publisher's or readers' perception of the story. However, since 2016, the term fake news has become synonymous with reader groups, who believe that any negative treatment of the topic of news articles is fake news (Marin Dell, 2019).

In the 19th century, William Hirst and Joseph Pritz. William Hirst and Joseph Pulitzer are among the ranks of media tycoons. As the two people are trying to attract readers, they have caused a circulation war, resulting in newspapers appearing more and more eye-catching and sensational headlines and pornographic news. This has caused the phenomenon of inciting public opinion in society. The New York Times founded by Hirst carried out unfounded and false reports on Spain's accusation of the sinking of a US warship and set off the first media war in the United States (Michelle Luhtala, Jacquelyn Whiting, 2018). The history of misinformation and fake news that caused public misunderstandings has a long history in the United States. However, in recent years, the large number of misinformation on social media has caused widespread panic. Many people believe that false stories were used in the 2016 U.S. election and subsequent ongoing political differences and crises have played an important role. Fake stories are equivalent to fake news.

Facebook has now stopped marking inaccurate stories as "controversial" and has been shown to moderately reduce the perceived accuracy of tagged titles (Blair, 2017; Hunt Allcott, 2018). The academic community's evidence on how the scale of the misinformation problem has evolved more broadly is still limited. A recent study believes that even after Facebook changed the platform's news feed algorithm, fake stories are still a problem on Facebook. Many articles rated as false by major fact-checking organizations have not been flagged in Facebook's system, although some studies have shown that the presence of warnings may cause unflagged false stories to be considered more accurate (Pennycook & Rand 2017).

Table 1. The definition of fake news by countries and scholars (tabulation: Huang Chao-Hsi)

Item	Scholar Definition Time	Definition	Time
1.	Marin Dell, 2019	1. Fake news and alternative facts that harm society are fake news. 2. Since 2016, the term fake news has become synonymous with reader groups, who believe that any negative treatment of the topic of news articles is fake news.	2019

2.	MichelleLuhtala, Jacquelyn Whiting, 2018	<p>1. Newspapers for more and more compelling, more and more sensational headlines. And through unsubstantiated allegations, unfounded reports (fake news)</p> <p>2. Politics and the media are closely related, and world leaders have long realized their capabilities and may need to control the truth. Anyone, regardless of training, morals, or motivation, doesn't need to invest \$100, Everyone can become a citizen journalist, and there are indeed problems in the verification of news, leading to an endless stream of fake news.</p>	
3.	Allcott, Gentzkow 2017	1. Misinformation and fake news that causes public misunderstandings have a long history in the United States, but in recent years, a large number of misinformation on social media has caused widespread panic. Misinformation and false stories constitute fake news.	2018
4.	Blair Hunt Allcott, 2018	1. Facebook has stopped marking inaccurate stories as "controversial" and has been shown to moderately reduce the perceived accuracy of marked titles (Blair, 2017; Hunt Allcott, 2018).	2018
5.	American Taiwan	1. According to the definition of the Office of the United Nations High Commissioner for Human Rights (OHCHR), the so-called fake news refers to "malicious, deliberately fabricated news that spreads in the form of news, and attempts to obtain certain political and commercial benefits through high-traffic clicks." "。	2018
6	Carlos Merlo Millonario Negocio	1. Fake news undermines proper media reporting, making it more difficult for reporters to report major news reports	2017
7	Woolf, Nicky	1. Deliberately create news topics and polarization in order to obtain fees provided by social media. The purpose of fake news is to obtain advertising revenue.	2016
8	Pennycook, Cannon	<p>1. In order to attract people's special attention, stories fabricated and spread on the Internet,</p> <p>2. Fake news is to deceive the public in order to obtain ideological and/or economic benefits.</p> <p>News information overload and confusion have become a common problem worldwide. The most common situation in news media transmission of information is distorted and deliberately distorted. It attracts people's attention and affects</p>	2017

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News is the dissemination of facts about current events and a means for the public to participate in the debate on the day. News can actually be created and disseminated by anyone, but the most reputable news comes from journalists and mainstream media. Traditionally, fake news is considered "news-like stories, whose purpose is not to provide information or education, but to attract Our preconceived narrative of how the world works, while also trading the brand names of news sources, although fake news is "deliberately misleading articles, usually published for profit or other benefits", it is often mistaken for not: "anything News you don't know "Disagree."

"The digital virus called forged is fake news." Because of the issue of fake news in the US presidential election, the people's fear of the media has evolved. Experts and scholars define fake news as a digital virus (New York Times, 2016). At the beginning of the global new crown pneumonia epidemic in 2020, due to a large number of false information and false news reports, it has a considerable impact on epidemic prevention. The false or malicious dissemination of false information about the new crown virus is defined as "information infectious disease." (WHO, 2020).

2.2 Fake news background

In order to avoid false information and deliberately created fake news from causing a greater crisis to the prevention and control of the epidemic, the World Health Organization invited UNICEF and the United Nations Development Programme to jointly establish a platform for the prevention of fake news (World Health Organization, 2020). The emergence of a large number of fake news has become a major factor in trying to influence the results of the 2016 presidential election in the United States. As long as American adults have been exposed to such information or topical news, they will affect their perceptions and believe that the news content is true (Guess, 2018). I was exposed to false stories before the 2016 election, and post-election investigations have shown that many people who read these stories believe that they are authentic (Allcott&Gentzkow, 2017; Guess, 2018; Michelle Luhtala, Jacquelyn, 2018). Based on a monthly survey from 2015 to 2018, the study compiled a list of 570 websites through websites that share stories on Facebook and Twitter social media. If these websites are determined to be the manufacture of false stories in five studies and online lists The author or source, these websites that spread false stories are collectively referred to as "fake news websites" (Allcott&Gentzkow, 2017; Guess, 2018). In Europe, a study shows that up to 85% of the people think that the problem of false information and fake news is quite serious, which poses a crisis to national security. According to the survey of European public sentiment trends, about 70% (68%) of the EU people are in the EU. People believe that life is full of fake news, which has had an impact on people's perceptions (TNS Political & Social, 2018).

Stanford University's media literacy assessment of 3,446 high school students across the United States in a digital environment showed that up to two-thirds of the students lack the basic skills to recognize information and cannot distinguish the difference between news reports and advertisements (Anna, 2019). An Australian survey on the use and influence of news media by younger generations found that "the younger generation has no sense of trust in the news media." 57% of teenagers trust their family members as news sources. Only 19% trust organizations that publish news. "Reading news generates more emotions"

because of the emotions generated by reading news: often or sometimes feeling scared (62%), anger (60%), sadness or depression (75%) (Cai Jinxiong, 2021).

Taiwan has accelerated its digital transformation work and has been forced to face both technological challenges and cyber threats after 2017. The problems of "fake messages" and "hacking attacks on public and private network messages" are the most serious (Sun Yali, 2020). The study pointed out that Taiwanese people's trust in the news continues to decline, with only 24% of the trust. The Reuters Institute of Journalism at Oxford University reports that the main reason is that Taiwanese often come into contact with wrong information through mainstream media and social media (Newman&Nic, 2020). News overload and chaos have become global problems. Global traditions and social media are thriving, and a large number of issues and information hide many false messages and fake news, and the information has been overloaded to make it difficult to distinguish right from wrong (Blair, 2011). Fake news is transmitted through topical news and affects the public. In digital network media, the gatekeeper authority of traditional news media does not exist. If young people cannot assess the credibility of a large amount of news, they will not be able to find out. The source and motivation of the news (Anna, 2019). The rate of fake news being forwarded is 70% higher than that of real news, and the spreading speed is six times higher. It is people who make fake news spread faster because people tend to share novel information, and fake news is more novel than real news. , It is easy to arouse people's emotional reactions of fear, disgust, and surprise (Vosoughi, Roy, Aral, 2018; Hu Yuanhui, 2019) enough to see the seriousness of fake news.

3. Current status of prevention and control of fake news in various countries

The convenience of information release and dissemination in the digital age has prompted the emergence of fake news. You don't need a wealthy tycoon to start a media organization. Everyone who has a mobile phone or computer, Internet access domain, and Internet registration fees, anyone, regardless of his or her training, morals, or motivation, can become a citizen journalist without investing \$100. . (Michelle&Jacquelyn,2018) The number of media producing fake news is uncountable, and the influence of misinformation on the whole "becomes unstoppable" (Ghosh & Scott, 2018). Therefore, the prevention of fake news is even more important. The highest guiding principle is to reduce the negative impact on freedom of speech (Taiwan Foreign Affairs and Defense Legal Affairs Office, 2018). Facebook and Taiwan Fact-Checking Center formally launched a third-party fact-checking program in Taiwan to curb false statements.

According to the book spread, Facebook has 53 fact-checking partners around the world, covering 42 languages. This project aims to cooperate with independent agencies certified by IFCN (International Fact-Checking Network). These verification agencies must be fair and non-partisan, and the source of information, funding, and organization, and verification methods are all open and transparent. If something goes wrong, there must be an open and honest correction policy. (TNL Media Group, 2019) The Executive Yuan amended 7 laws and regulations including the Disaster Prevention and Rescue Law and the Radio and Television Law. The 7 bills included norms and penalties prohibiting the spread of fake news. In the most serious cases, chaos Those who spread fake news could be fined 1 million in fines or life imprisonment. The amendment to the Radio and Television Law also requires radio and television journalists to establish a "self-discipline and regulation mechanism." If they spread false information without "fact-checking", they can be fined up to 2 million (Executive Yuan, 2018). After the 2016 presidential election, the United States began a series of efforts, including 18 state legislative plans to solve the problem of fake news (Joel & Sam, 2019).

The US "Anti-Foreign Propaganda and Rumor Act" (also known as the "Portman-Murphy Anti-Propaganda Act") took effect in 2016. The State Department convened the Department of Defense, the Agency for International Development, the Broadcasting Council, and intelligence agencies to establish it. The inter-ministerial meeting "Global Warfare Center" trains journalists from all over the world, and assists think tanks, civil organizations, and non-governmental organizations to fight against political propaganda from foreign governments such as Russia and China. In addition, Congress is proposing the "Honesty Advertising Act" to require that political propaganda advertisements on television, radio, print, or digital media must indicate sponsors. The National Security Agency of the United States will also monitor and a crackdown on spreading rumors, and provide financial assistance to third parties when necessary. (Sun Yuqing&Liu Yiting, 2019). Germany has enacted laws to impose penalties on these technology social platforms for failing to delete "obviously illegal" hate speech; the German "Social Network Enforcement Law" stipulates that social media platforms must be reported within 24 hours Remove obviously illegal content, including hate speech, malicious slander or incitement to violence, otherwise, it can be fined more than 5 million and less than 50 million euros; for content that is controversial but not illegal, social media has Seven days can be considered for removal. (Luo Shihong, 2018).

France has also passed a law prohibiting the posting of fake news on the Internet during elections. The two anti-fake news bills just passed in France this time are aimed at deliberately manipulated false information. In particular, within three months before the election, political parties or candidates have the right to apply for an injunction on false information that is suspected of deliberately manipulated. The court must also make a ruling within 48 hours. In addition, the new law also stipulates that social media platforms should publicly disclose the true identity of the funders who are behind advertising to promote political content and authorize the French High Audiovisual Commission (CSA) to be "controlled or influenced by foreign forces" (controlled or influenced by foreign powers) that intend to influence elections. by, or under the influence of a foreign power) The TV channel is removed (Luo Shihong, 2018).

The legislative effects of Germany and France seem to be quite significant. After Germany passed the "Social Network Enforcement Law", Facebook dared not continue to use the habit of "denying, delaying and shifting focus" and was willing to invest one-sixth of its global content censorship manpower in Germany; passed in France Not long before these two bills, Facebook also agreed that it would cooperate with the French government to improve the transparency of platform operations, including agreeing to let the French government send staff to Facebook for half a year to supervise its fight against fake accounts, fake news and hate speech. The actual operating status of the aspect (Luo Shihong, 2018).

The Canadian Federal Government will set up a special team led by five officials without party affiliation to coordinate the Ministry of Foreign Affairs, intelligence agencies, and other units. After determining that foreign interference in Canadian elections has a certain degree of influence, it will report to the Prime Minister, registered political parties and The public issued a warning. Canada passed the C-76 Campaign Advertising Transparency Act last December, requiring online platforms to register political and partisan advertisements published directly or indirectly, and offenders will face fines or penalties (Sun Yuqing&Liu Yiting, 2019). Russia, under Putin's announcement, prohibits the media from distributing fake news and false news that does not respect the government, and illegal media can be fined or imprisoned. The law will punish the spread of public statements and messages that "obviously disrespect Russian society, the government, the government, the constitution, or government agencies." The law states that online news media and Internet users who spread "fake news" will face a fine of up to 1.5 million rubles, and those suspected of insulting national symbols (including President Putin) will be fined 300,000 rubles, And imprisonment for 15 days. (Chen Yingshi, 2019)

South Korea has also enacted laws, but in the face of many challenges in fact-checking fake news, JTBC's fact-checking team leader Li Jia-hyuk believes that the first is how to maintain political neutrality, and the second is to keep a high degree of vigilance

on whether fact-checking is used by those who want to use it. (Liu Minyu, 2019). In addition, politicians may spread false information to achieve political goals, or have Internet celebrities profit from false information. The facts span a wide range, but fact-checking organizations have limited manpower and are difficult to grasp. Comprehensive information, how to check with limited manpower and time, close to the truth, is the biggest challenge currently faced by the checking work.

The former editor-in-chief of BuzzFeed Japan Daisuke Furuta said that the harm of fake news should be relatively minor in Japan, mainly due to the habit of Japanese readers who "dislike sharing". In Japan, only 13% of Japanese netizens will actively share news, and only 8%. Netizens will comment. Japanese readers have gradually reduced their trust in Japanese media. According to the survey, only 17% of Japanese believe that the news media has the responsibility of supervising those in power, but the media feel good about themselves. 91% of media reporters believe that they have reached the level of supervising those in power. Duty. The media in Japan has lost credibility and has become an obstacle to fact-checking because readers do not believe in the content of media reports. This is the main reason that Daisuke Furuta decided to create a "media collab", hoping to fight fake news. (Liu Minyu, 2019) Yoichiro Tateiwa, the chief editor of Seeds for News, a Japanese non-profit investigative news organization, is also Japan's first fact-checking organization FIJ (Factcheck Initiative Japan), and co-founder of Japan Center for Money and Politics. The situation of fake news in 2011 shows that the public's attitude towards fake news was relatively relaxed, and many people even regarded fake news as a joke. Only in recent years has the public gradually paid attention to the problem and treated it seriously. (Liu Wenyu, 2019) After in-depth communication and discussion with relevant stakeholders, the European Commission has been invited to continue and strengthen the various studies and actions that have been carried out, and actively launch new plans, including encouraging fact-checking and civil society Organize the provision of school textbooks and regularly publish media literacy survey reports (Eliza, 2019; Chen Lingyi, 2019).

Table 2: Penalties for fake news in various countries

National	Penalties related to fake news
Taiwan	Taiwan's "Broadcasting and Television Law" and other seven laws and regulations have included norms and penalties for prohibiting the spread of fake news. In the most serious cases, people who spread fake news indiscriminately may be fined 1 million yuan or life imprisonment. The amendment to the Radio and Television Law also requires radio and television journalists to establish a "self-discipline and normative mechanism". If they spread false information without "fact-checking", they can be fined up to 2 million yuan (Executive Yuan, 2018)
Russia	The media is prohibited from distributing fake news and false news that does not respect the government, and illegal media can be fined or imprisoned. The law will punish the spread of public statements and messages that "obviously disrespect Russian society, the government, the government, the constitution, or government agencies."The law states that online news media and Internet users who spread "fake news" will face a fine of up to 1.5 million rubles, and those suspected of insulting national symbols (including President Putin) will be fined 300,000 rubles, And imprisonment for 15 days. (Chen Yingshi, 2019)
United States	The US "Anti-Foreign Propaganda and Rumor Act" (also known as the "Portman-Murphy Anti-Propaganda Act") came into force in 2016. The State Department convened the Department of Defense, the Agency for International Development, the Broadcasting Council, and intelligence

	<p>agencies to establish it. The inter-ministerial meeting "Global Warfare Center" trains journalists from all over the world, and assists think tanks, civil organizations, and non-governmental organizations to fight political propaganda from foreign governments such as Russia and China. In addition, Congress is proposing the "Honesty Advertising Act" to require that political propaganda advertisements on television, radio, print, or digital media must indicate sponsors. The National Security Agency of the United States will also monitor and crackdown on the spread of rumors, and provide financial assistance to third parties when necessary. . (Sun Yuqing, Liu Yiting, 2019).</p>
France	<p>France's current "Press Freedom Law" was promulgated in 1881. It already includes provisions to prevent hate speech and fake news. Violators can be punished with imprisonment for more than 6 months but less than one year, or a fine of up to 45,000 euros (About 400,000 Hong Kong dollars). In order to strengthen relevant laws and regulations, France passed a new bill in July 2018. In the three months before the election, political parties or candidates have the right to apply for an injunction against false information that is "suspected of being deliberately manipulated" to prohibit the dissemination of false information. According to the bill, during the election period, candidates have the right to sue the media for controversial news reports, and then the court will make a ruling; if they are found to be false reports, they can request media companies to delete relevant reports. (Chen Yingshi, 2019)</p>
Germany	<p>Germany's "Social Network Mandatory Law" (NetzDG) came into effect in January 2018. Social platforms with 2 million users must delete "obviously illegal" articles within 24 hours, including fake news, Terrorism, racial discrimination, otherwise, you will face a fine of 50 million euros. The Digital, Cultural, Media, and Sports Committee of the British Parliament pointed out that technology companies must be more effective in handling misleading information and must take "clear legal responsibilities." At the same time, they also set up an investigation committee to study and resolve the spread of fake news. Derived problems. The German Social Network Mandatory Law can fine up to 50 million euros. (Sun Yuqing, Liu Yiting, 2019).</p>
Egypt	<p>The Egyptian Parliament passed a law in July 2018 that allows the government to punish media that publish fake news and block social software accounts, and offenders may be prosecuted. The law states that the authorities can close social media accounts with more than 5,000 followers without obtaining a court order on the grounds of "fake news," and block website content on the grounds of "threatening national security" (Chen Yingshi, 2019).</p>
Canada	<p>The Canadian Federal Government will set up a special team led by five officials without party affiliation to coordinate the Ministry of Foreign Affairs, intelligence agencies, and other units. After determining that foreign interference in Canadian elections has a certain degree of influence, it will report to the Prime Minister, registered political parties and The public issued a warning. Canada passed the C-76 Election Advertising Transparency Act last December, requiring online platforms to register political and partisan advertisements published directly or indirectly, and offenders will face fines or penalties (Sun Yuqing, Liu Yiting, 2019).</p>

4. Background and current status of media literacy promotion

4.1 Promotion of News Literacy Education

Fact-checking to combat misinformation will not work (Levin, 2017). Fake news is transmitted through topical news and affects the public. In digital network media, the gatekeeper authority of traditional news media does not exist. If young people cannot assess the credibility of a large number of news messages, they will not be able to find out. The source and motivation of the news (Joel, Mark, Sam, Amie, Jill, Marshall, Anna, 2019). Media literacy skills are the only way to prevent its spread. The European Commission has been invited to gather relevant stakeholders for in-depth communication and discussion and listed the strengthening of citizens' media literacy as a key work item for curbing false information. In addition to continuing and strengthening the various activities that have been carried out, new plans are actively launched, including encouraging fact-checking and civil society organizations to provide school textbooks, holding media literacy weeks, and regularly publishing media literacy reports (Eliza, 2019; Chen Lingyi, 2019). The earliest discussion on the subject of literacy and the birth of the term literacy by media information originated from the reform movement that began in the 1960s that emphasized critical thinking and learning. 2 One of the original uses of the term media literacy is attributed to a paper published in 1974 by Paul Zurkowski, the former chairman of the American Information Industry Association. (Hunt, Matthew, Chuan Yu, 2018) Media literacy education can help everyone fight fake news, substitute facts, and the wide spread of false information in our society. Media literacy should be an essential part of our education system at all levels. Media literacy education is the same as legal education. Media literacy education also teaches critical thinking skills to improve cognitive ability, can evaluate media information, and determine the authenticity, falseness, or prejudice of media communication in their professional and personal lives (Marin, 2019). The global spread of fake news through information dissemination has seriously affected people's lives. Only through training and cultivation can people produce critical thinking. Such literacy ability can resist one-sided propaganda and conspiracy theories (UNESCO, 2021). Educators are responsible for stimulating inquiry, fostering empathy, fostering curiosity, cultivating skepticism and creativity, while also teaching smart consumers who seek and receive information for them. The tools have changed. Our teaching strategy has changed. But our learning goals remain the same, whether it's teaching journalism, promoting independent reading, or leading maker projects. (Michelle & Jacquelyn, 2018) The National Association for Media Literacy Education ("NAMLE") pointed out that "Media literacy is the use of all 45 media literacy. This definition is very attractive because it covers people who are exposed to media information on their views and beliefs are the basic interactions necessary to make wise decisions; that is, it's true and false. NAMLE also stated that media literacy enables people to become critical thinkers and creators, effective communicators, and active citizens. "This is right. An important difference between lawyers, because critical thinking is one of the hallmarks of the legal profession, and it emphasizes that critical thinking and communication are necessary qualities for law students and effective lawyers. (Marin, 2019) In 2000, the Association of Universities and Research Libraries (ACRL) defined information literacy as "the ability to require individuals to recognize when they need information and be able to effectively locate, evaluate, and use the required information." 8 Although recognized The importance of skills and the satisfaction of mastering skills are still elusive. This raises the question of how to attract the most needed information literacy education (Caroline & Osborne, 2018).

4.2 The importance of news issues in media literacy

The media has the function and influence of media reporting. The deliberate reporting of specific events by the media will cause people to pay attention to these topics and events, and also affect the public's awareness (Weng Xiuqi, 1995; McCombs & Shaw, 1972; Morgan & Signorielli, 1990).

"Literacy" means to analyze and evaluate the elements in these messages when receiving a lot of information to understand and adapt to changes in the external world; and "media literacy" means to evaluate media messages and generate feedback on the media and news. Information cognition and the ability to "media literacy" means critical thinking and the ability to distinguish fake news (W. James Potter, 2018). Communication media is the main medium for citizens to acquire knowledge and skills. The more developed the mass communication system, the faster people can get the latest current events and issues, the more they rely on the mass communication media (Vraga, Tully, Kotcher, Smithson, Broeckelman, 2018). The Sustainable Development Goals organization advocates the use of social media and digital media to disseminate information about sustainable development goals, provide and share information and resources, and achieve sustainable development actions (United Nations, 2016). Communication media can show the real social conditions, convey the opinions of relevant ethnic groups on issues, and the implementation effects of government policies. Therefore, the media is important in sustainable development and sustainable education. The UNESCO IPDC released the Media Sustainability Index in 2015, which has become an important reference for media practitioners, policymakers, and development participants. It proposes action strategies for all communication stakeholders, drives the implementation of national policies and supervision of their effectiveness, and draws public attention to global sustainable development issues (UNESCO, 2018).

Academia has long recognized the power of knowledge and the need to use information effectively. Media literacy has the following key points: 1. Attention deficit ("attention deficit") that requires information literacy. 2. Lack of the need to critically examine and read the information used. 3. There is a confirmation bias in consumer information. 4. The business model of fake news or inferior information is becoming more and more complex. 5. The way we obtain information has fundamentally changed. (Caroline & Osborne, 2018) The media can continue to report on certain major issues through news through strategic settings, and trigger a series of topic discussions, or make the issues more controversial, and even produce similarities to listeners or readers. Mobilization and change effects of "hypnosis" or "brainwashing" (Hong Shizhang, Zeng Yongqing, 2013; Luo Weisen, 2014). The topic of news media has an educational function, however. It may convey biased ideology, singular values, and deviate from the real social representation when conveying information on issues. All media content is produced through the process of selection and construction (Ministry of Education, 2002). "Fake news" originally refers to fabricating stories in social media and composing them into news, but now they are biased, have limited opinions, exaggerate, or combine facts with fiction, and are also called fake news. The emergence of so many definitions of the term "fake news" shows that the topic news accepted by the general public is likely to be more than positive. Fake news is impacting people's lives through traditional and social media (Ellen, 2018).

News literacy should help children learn logical reasoning, thinking, and problem-solving methods, help identify fake news, replace facts and false information (Wu Cuizhen & Chen Shimin, 2007) News reports should be constructed based on accurate facts rather than the opinions of the media and reporters themselves. (Potter, 2019). When major issues occur, you can see unobjective news, such as elections, natural disasters, and social movements. A large number of news topics and false information continue to be produced and spread through the media to impact the international community. Take the recent COVID-19 pandemic as an example. Miscommunication related to the pandemic by the media, or maliciously created false information, has had a considerable impact on epidemic prevention, and reliance on the media has increased the risk of negative impacts on people (Michael, Tanya, Kristy, 2020). The public relies on the media to obtain a large amount of news information and new knowledge. When the public uses online media as a source of information, they are bound to face the situation of being influenced by the media and even receiving false information. When the information is incomplete or deliberately transformed or de-contextualized After transformation, it may cause harm to society. It is of great significance to promote the literacy of news media, and it will help the public to avoid the influence of fake news. (Zhang Guoen, 2020). Reliable media and information systems are a

prerequisite for the sustainable development of any society. In the current media environment full of misinformation, distorted facts, and prejudices, media literacy has become very important for sustainable development (Kumar, Mukesh. Husain, Asif, 2019).

The integration of issues into practice emphasizing problem-solving skills and actions can enhance the educational value of domain knowledge content learning; the teaching objectives integrated into issues can promote the critical thinking and problem-solving learning that PISA values, and fully respond to the UN's 17 sustainable development The connotation of the SDG (Zhang Zichao, 2017) Finland also advocates that citizens should think critically, be conscious of false news, and check news facts (Chen Lingyi, 2019; Eliza, 2019). After Taiwan published a white paper on its media literacy education policy in 2002, media literacy is the government's policy to promote lifelong learning, as well as to communicate with the people and improve social abilities (Ministry of Education, 2002). It has become one of the civic education goals of all countries in the world to give citizens the ability to think critically, criticize topic news, and understand the use of media and the purpose of production and broadcasting (Cai Jinxiong, 2020).

5. Media Literacy Promotion and Cognitive Theoretical Structure

5.1 The importance of media literacy promotion

As the number of news production increases and the speed of dissemination increases, when people absorb a large amount of media information, the checking of the source of the news becomes more complicated and burdensome (Potter. 2004). Due to the proliferation of fake news, countries around the world have realized the importance and urgency of news media literacy as a citizen's quality. The United Nations pointed out that citizens of a knowledge society should have media literacy, improve their cognition, be able to judge and stop the flood of fake news and fake news, and learn to improve the knowledge, skills, and cognitive abilities necessary for news literacy, which is in line with the meaning of sustainable education. It is 21 The knowledge, skills, and attitudes needed for life and work in the century (Julie, Kalina, 2021). The impact of the potential importance of news media literacy is obvious: audiences can better obtain, evaluate, analyze, and create news. If they have a more comprehensive understanding of the conditions under which news is generated, they will choose the appropriate media (Ashley, Maks, Craft, 2013). American media literacy attaches great importance to think about the means and purpose of the media to create news issues. The first of the six core principles of the National Association for Media Literacy Education in the United States to promote news literacy is to initiate critical thinking on the media and explore the views of issues (Lesley, 2019). When the news media set up issues for dissemination, it also entrains biased ideology, singular values, and deviating from the real social representation. In fact, all media content is produced through the process of selection and construction (Ministry of Education, 2002). The National Organization "The Partnership for 21st Century Skills" (The Partnership for 21st Century Skills) has listed "media literacy" as an important and necessary life skill, and it is also the competitive strength that students must have today (Cultural Section of the Taipei Economic and Cultural Office in Los Angeles). The Frankfurt School of Communication in Germany described the critical theory as a critical theory of culture and ideology. Under the control of the social ideology by the media, the media itself is an ideology and a tool of ideology. The media serves as a tool to instill and manipulate false consciousness and false demands (LiangMeishan&ZhuangDipeng, 2016). Terrorism scholars claim that the media has become a propaganda tool for terrorists and portray terrorist activities sympathetically. Through the production of topical news, it is seen as a social process that both informs and conceals, rather than a neutral process that only provides "objective" facts. (Erin, 2010).his shows the importance of media cognition theory. And from the point of view of the goal of education, it is not only "to make people understand the cognition and judgment of news texts used by the media", but also to include the form of personal "critical thinking literacy", as well as the

system and context of the existence of the media in the society. Thinking and how these factors affect people's experience and practice aspects (Buckingham, 2003). Journalists will be affected and restrained by the media so that the news cannot reflect the truth of the event. (Potter, 2019)

Taiwan emphasizes the six major connotations of media literacy education, of which the most important is to improve the critical thinking ability of the media. These connotations include 1. To cultivate individuals to actively explore and critically think about the information we create or receive ; (Ministry of Education, 2002) As a reader, you should know the position of the media, and you also need to understand the background and causes, phenomena, and effects of issues, and enhance your sense of responsibility and action in facing news issues. The mission of media literacy education is to: speculate about media and its practical purpose, cultivate students' and citizens' independent learning, critical thinking, and problem-solving abilities (Ministry of Education, 2002).

5.2 Cognitive Theory of Media Literacy

Cognitive theory is used in many academic fields, including experimental animal and comparative medicine, journalism and communication, psychology, educational psychology, administration, etc. In 2004, scholar Porter proposed the "Media Literacy Cognitive Theory". He used cognitive psychology in media literacy and became the first scholar to use cognitive theory to discuss the influence and effects of communication. At that time, Porter proposed the "Necessity of Media Literacy Cognitive Theory." In the article "Argument", he argues that individuals should be regarded as the "center of media literacy"-not schools, parents, or the media industry. In addition, Porter believes that it is not enough to educate individuals on the nature of the media and the potential harm of various information. A more fundamental problem than education is to establish a deeper analysis and understanding of how human thinking works. Therefore, we need a cognitive theory that focuses on the special characteristics of media exposure and explains how people filter information and construct meaning from this information (Potter, 2004).

Some psychologists interpret the changes in learning as a process of cognition. This view regards the individual's knowledge and understanding of things in the environment as a necessary condition for learning, so it is called epistemology. The self-efficacy of knowledge sharing behavior is a person's confidence in self-knowledge sharing, believing that he can provide knowledge that is valuable to others, and emphasizing that self-efficacy will affect the motivation and behavior of personal knowledge sharing, that is, higher knowledge Sharing self-efficacy may have better knowledge sharing qualities (Kankanhalli et al. 2005). There are many examples in our daily lives that are learned and learned. For example, in mathematics, if you do not understand the principles, you will never be able to do exercises; in language expression, if you do not understand the structure, you will not be able to convey the correct meaning. The cognitive theory originated from Gestalt Psychology at the beginning of this century, focusing on the integrity of perception and the relationship between many stimuli in the environment (Liu Dewei, 2000). Cognitive theory has social interaction with the public through social media and social perception has a positive impact on cognitive absorption. (Shi Xinlan, 2019) The media uses news and advertisements to set issues, portray groups, distort and change the real appearance, and change people's perceptions (Richard, 2009).

Issue news has an impact on people's views. In order to build a deep understanding of the topic news, we need to establish a media literacy cognitive theory that focuses on the special characteristics of media exposure and explains how people filter information and construct meaning from this information. (Potter, 2004). There is a strong and major demand for the cognitive theory of topic news and media literacy, and this position is supported by two principles. The first principle is that the individual (reader) is first. The second principle is that personal internal cognition is the most important, that is, behavior changes are based on cognition.

Educating people to improve media literacy does not only include letting them understand the media content, the motivations of the media industry, and the potential negative effects; it requires an in-depth understanding of how people use media in their daily lives, and how people begin to believe that their media use helps Achieve their goals (Potter, 2004). Promoting news literacy is usually successful and has a positive impact on media knowledge, criticism, perceived realism, influence, behavioral beliefs, attitudes, self-efficacy, and behavior (Jeong & Hwang 2012).

5.3 Analysis of the knowledge structure of Porter's cognitive theory

Potter emphasizes INDIVIDUAL IS PRIME. Individuals usually use it as a means to solve certain social, institutional, or personal problems. The reasoning of the cognitive theory of literacy in news media is that the media convey harmful information in a certain way while protecting The best way for people to avoid this harm is to pressure the media to change their practices, empower change agents (such as parents and teachers), or educate individuals to a higher level of awareness (Potter, 2004)). In the process of daily contact with media information, knowledge is not very prominent for most people. Therefore, the important question is: Why are these views not more prominent? The cognitive theory will help people better understand the media information they already have and how they use it to construct meaning (Potter, 2004).

Porter believes that the cognitive theory of media literacy helps to directly focus on how people encounter a large number of media information streams in their daily lives, that is, how they make filtering decisions, and how they effectively combine the symbols in the information with the learned meaning Connections and how they construct new meanings for themselves (Potter, 2004). There is a strong and major need for the cognitive theory of media literacy, and this position is supported by two principles. The first principle is that the individual (reader) is first. The second principle is that personal internal cognition is the most important, that is, behavior changes are based on cognition. Educating people to improve media literacy includes not only letting them understand the media content, the motivations of the media industry, and the potential negative effects; it requires a deep understanding of how people use media in their daily lives, and how people begin to believe that their media use helps Achieving their goals and how adverse effects (media influence) accumulate as a by-product of daily contact (Potter, 2004).

Table 1 W. J. Potter (2004) Media Literacy Cognitive Theory

Dimension and definition of model theory "Assessment of Mass Media Knowledge Structure"

Face to	Dimension	Definition
Media industry	Media identification	Get to know news media companies and their development history
	Industrial Development	
	Media economy	Understanding of media industry trends
		The scale of the industry
Media audience	Message processing	How the audience handles the message
	Information exposed	How the information is exposed and attracts the attention of the audience
	Analyze the audience	
	Pay attention to the audience	How to distinguish the audience

	niche	How to understand the audience and use strategy
	Cognitive theory	
Media content	concept	What happened to the concept of news
		What is the principle of truth
		How to judge the quality of news
Media influence	Effectiveness	How to increase the effectiveness of news media
	Variable	What are the variables that affect the effect

Potter, W. J. (2004). *Theory of media literacy: A cognitive approach*. Thousand Oaks, CA: Sage.

There are five basic knowledge structures in Porter's model-"media content", "media knowledge", "media effects", "real world and self". These five aspects help people be more capable of making information. Better decision-making and construct meaning from it (Potter, 2004) The knowledge structure provides the context that we use when trying to understand each new media message. The more knowledge structure we have, the more confidence we can understand all kinds of information. (Potter, 2018). News media literacy refers to the knowledge and motivation needed to identify and participate in journalism. The three components of media literacy are skills, knowledge structures, and personal locus (Potter, 2004) The Potter Media Literacy Cognitive Model shows that people with media literacy think deeply about their media experience, believe that they can control the influence of the media, and have a high degree of "media content", "industry and effect" Basic knowledge. (Maksl, Ashley, Craft, 2019).

6. Current status and promotion content of media literacy education in Taiwan

6.1 Thinking direction of Taiwan's education authority

"Issue" is a topic of discussion in daily life. It not only involves seeking answers to questions, but also exploring various possible alternative answers (multiple viewpoints), and analyzing the viewpoints (value positions) behind various answers to clarify the value, Choose options and make decisions, and even generate actions. Specifically, the topic has the following characteristics: contemporary, contextual, cross-domain, discussionFive characteristics (National Education Institute, 2017)). The mission of Taiwan's media literacy education is to: speculate on media and its practical purpose, cultivate students' and citizens' independent learning and critical thinking and problem-solving abilities (Ministry of Education, 2002). The six major connotations of media literacy education in Taiwan, especially the improvement of the critical thinking ability of the media are the most important. These connotations include 1. To cultivate individuals to actively explore and critically think about the information we create or receive; (Ministry of Education, 2002). The syllabus for topic education also proposes "Supplementary Explanations", "Suggested Methods for Integration into Various Learning Areas", "Corresponding to the Ten Basic Ability", and "Assessment Methods". These contents can provide teachers with self-compiled textbooks, or textbook editors can fully guide and master the spirit of education and the methods of teaching practice when designing textbooks (Ministry of Education, 2008). Taiwan's 12-year National Basic Education Curriculum emphasizes the integration of issues into the curriculum. It can explore, analyze and think about issues from different field/subject perspectives, provide cross-field integrated learning opportunities, and highlight the contextual nature of the issue and the diversity of perspectives The Academy of Education, 2017). Issue education

develops the ability to use text to think, solve problems, and construct knowledge. In response to the advent of the digital age, a reader should develop a willingness to read, and should also develop the ability to retrieve texts, obtain information, and interpret information to solve problems. (National Academy of Education, 2017) Since the broad curriculum covers the educational practice of teachers and students, the meaning of curriculum transformation is not only the transformation of knowledge but also the transformation of teachers and students (Pan Huiling&Zhang Jiayu, 2019). Issue education is an international trend and a characteristic of the development of the syllabus of Taiwan's primary and secondary schools. Issue education has the theme of "topic education is based on issues faced in life", "topic education is learning that respects multiple perspectives", and "topic education has value analysis "Reflection and clarification of learning significance" and "problem education to provide problem-solving learning and practice" and other characteristics (Zhang Zichao, 2017).

6.2 Taiwan News Literacy Education Policy

The five aspects of "media content", "media knowledge", "media effects", and "real world and self" help people to make better decisions about information and construct meaning from it (Potter, 2004). Porter's cognitive theory has a great influence on Taiwan's twelve-year national basic education curriculum. Taiwan's national education curriculum is divided into three aspects: "autonomous action", "communication and interaction", and "social participation." "Media literacy" is listed as one of the 9 core literacy of the twelve-year national basic education, emphasizing the cultivation of people-oriented "lifelong learners", communication and interaction: emphasizing that learners should be able to widely use various tools to effectively interact with others and the environment. Cultivate students and even Chinese to understand the creative potential of using media and information tools, positive use methods, and the ability to read media. Taiwan's curriculum planning is mainly to allow students, teachers, or people to understand and learn to recognize the content delivered by the media. It not only needs to arouse everyone's attention and attention to media literacy education in the digital age, but the Ministry of Education also needs to deepen the media literacy education of Chinese people. Construct a healthy media society. Taiwan's media literacy education responds to international trends and current domestic social conditions, referring to the "Global Media and Information Literacy Assessment Framework: National Reserves and Capabilities" published by the United Nations Educational, Scientific and Cultural Organization in 2013, emphasizing that the country can use this framework to create a favorable environment and improve citizens Competence assessment includes "the ability to seek and obtain information", "the ability to evaluate and interpret the information" and "the ability to create and share". (Ministry of Education, 2014)

The 12-year National Education Curriculum of the Ministry of Education stipulates "Technology Information and Media Literacy", and the project description "can make good use of technology, information, and various media, and cultivate related ethics and media literacy. , To be able to analyze, speculate, and criticize the relationship between people and technology, information and media." (Ministry of Education, 2014) The core literacy content of "Technology Information and Media Literacy" in the 12-year National Basic Education Curriculum, Senior Secondary School Education They should have the appropriate use of technology, information, and media literacy, conduct various media literacy and criticism and be able to reflect on issues of technology, information, and media ethics. National secondary education should have the ability to make good use of technology, information, and media to enhance learning, and to perceive and speculate on the interaction between people and technology, information, and media. (Ministry of Education, 2021).

Table 3: Media Literacy Courses of the Ministry of Education (Source: Ministry of Education)

Core literacy	Project	National Elementary School	National Secondary Education	Senior High School Education
Technology Information and Media literacy	Have the ability to make good use of technology, information, and various media, cultivate related ethics and media literacy, and be able to analyze, speculate, and criticize the relationship between people and technology, information, and media	Possess the basic literacy of technology and information application, and understand the meaning and influence of various media content.	Have the ability to make good use of technology, information, and media to enhance learning, and to perceive and think about the interaction between people and technology, information, and media.	Possess the appropriate use of technology, information, and media literacy, conduct various media reading and criticism, and be able to reflect on the issues of technology, information, and media ethics.

7. Conclusion

Fake news is a serious problem. Governments around the world are actively helping the public to increase their control over fake news. This article mentions that the United States, France, Germany, and other countries are strengthening their mass media literacy in order to combat fake news in an all-around way. "The severity of news", "the way countries deal with fake news", "the importance of promoting news literacy", and "an explanation of Porter's cognitive theory", and finally explain the "educational environment for news literacy in Taiwan." This article analyzes that because fake news may provoke people's perception of the government of society because of false information and fake news, including the United States and Russia

Countries such as France, Germany, Canada, and Egypt have all enacted strict laws to face the attacks of fake news. Japan, South Korea, and Taiwan have also set up fact-checking centers to solve the problems of the verification of false statements and reports. However, severe penalties are not as important as promoting the importance of sustainable education, because through the analysis of this article, when the media has become the main medium for citizens to acquire knowledge and skills, while the people can also become citizen reporters, people should also understand that they can be anytime, anywhere. To get the latest current events and issues faster, you must understand the media better and understand the media. Therefore, understanding media literacy is to evaluate news and generate awareness of the media and news information. Therefore, as long as people can improve their literacy skills, they can improve their cognitive abilities and can judge, think, and distinguish information and news.

It has been 17 years since Potter's media cognition theory has been applied. The core of successfully defining media literacy is to enhance self-cognition, and use self-cognition to accurately analyze and solve every deliberately designed issue news. Media cognitive theory is to find out and analyze. The important theories of each aspect are used as the core way to solve fake news attacks. Although the Ministry of Education of Taiwan has listed "Technology Information and Media Literacy" as the "Twelve-Year

National Basic Education Curriculum", Taiwan actively promotes media literacy to "seeking and acquiring information skills", "evaluating and interpreting information skills" and "Creation and Sharing Ability" as the goal, from "committed to taking root down, cultivate thinking ability", "strengthen teacher training ability, cultivate and promote the ability of quantity" and "cultivation of national literacy through multiple channels", through elementary schools, The various educational stages of junior high schools and high schools jointly promote media literacy education. This article suggests that the government can promote the education of national literacy skills and design a set of courses based on the theoretical framework of media cognition as a course for the government to promote education to improve the face of each interpretation of the news and avoid the harm of fake news.

Reference

1. Adams, D., & Hamm, M. (2001). *Literacy in a multimedia age*. Norwood, MA: Christopher-
2. Adam Maksl, Stephanie Craft, Seth Ashley, Miller. (2016) *The Usefulness of a NewsMedia Literacy*
3. *Measure in Evaluating a News Literacy Curriculum*.
4. Adam Maksl, Seth Ashley, Stephanie Craft. (2018). *The National Association for Media Literacy Education's Journal of Media Literacy Education* 6(3), 29 – 45 *Measuring News Media Literacy*.
5. Adam Maksl, Seth Ashley, Stephanie Craft.. (2019). *Measuring News Media Literacy*. *The National Association for Media*
6. *Literacy Education's Journal of Media Literacy Education* 6(3), 29 – 45.
7. Adam Maksl, Seth Ashley, Stephanie Craft.. (2013). "Developing a news media literacy scale."
8. *Journalism & Mass Communication Educator* 68, no. 1 (2013): 7-21. Gordon Publishers.
9. Blair, Ann M. (2011). *Too Much to Know: Managing Scholarly Information before the Modern*
10. *Age*. New Haven: Yale University Press.
11. Carlos & Millonario. (2019) . *Fake News*. Univision Noticias, 2017.
12. Caroline & Osborne. (2018). *Programming to Promote Information Literacy in the Era of Fake*
13. *News*. *International Journal of Legal Information* 46.2, 2018, pp. 101–109. © The Author(s) 2018
14. doi:10.1017/jli.2018.21.
15. Cai Jinxiong. (2020). *How do Australia and the United States respond to the challenges of media*
16. *literacy?* Taipei, National Center for Educational Research, Educational System and Policy Research.
17. Chang, W.C. (2010). *A study of media literacy on social studies curriculum in a primary school: From*
18. *critical pedagogy perspectives*. *Instructional Technology & Media*, 94, 75-89.
19. Christ, William G. (2014). *Assessment, Media Literacy Standards, and Higher Education*.
20. *American Behavioral Scientist* 48, no. 1 (2004): 92-96.
21. Dezuanni, M., Notley, T., & Corser, K. (2020). *News Literacy and Australian Teachers: How News*
22. *Media is Taught in the Classroom*. Retrieved from Queensland.

23. Du, X. Y., Guan, Y. B., & Hsieh, T. S. (2020). Research on the Curriculum Development of Education
24. for Sustainable Development(ESD) from the Perspective of VR / AR assisted instruction——
25. Take Guangdong Business and Technology University as an Example. 2020 IOP Conf. Ser.:
26. Earth Environ. Sci. 576 012019. Doi:10.1088/1755-1315/576/1/012019.
27. Education Section of the Representative Office in Australia.(2020). Australian "Media Literacy
- a. Education" Teaching Site Physical Examination Report: Student Part (Part 2). National Academy of Education
- Taiwan Education Research Information Network. Retrieved from <https://reurl.cc/ynNRg6>.
28. Huiling.(2001).The integration and transformation of gender education issues in the nine-year
29. consistent curriculum. Contained in Hong Jiuxian, Tang Meiying, editors, Gender and Human
30. Rights Education (pages 27–50). Taipei City: National Taiwan Normal University.
31. Huiling&Jiayu.(2019).The ways and methods of implementing the topic education in the syllabus of
32. the twelve-year national education. Taiwan: School Administration Research Association of
33. the Republic of China, 2019.
34. Hu Yuanhui.(2019).Defensive skills of fake news-develop critical thinking skills. Media Literac
35. Education Information Network of the Ministry of Education.
36. Julie, Kalina.(2020).Published in 2020 by the United Nations Educational, Scientific and Cultural
37. Organization,7, place de Fontenoy, 75352 Paris 07 SP, France© UNESCO.
38. Kankanhalli,Tan. (2005). Contributing knowledge to electronic knowledge repositories: An empirical
39. investigation. MIS Quarterly, 29(1),113-143. doi: 10.2307/25148670.
40. Luo Shihong.(2018). The prevention and control of fake news cannot follow the path of national
41. security law. The experience of Germany and France is worthy of reference for Taiwan. Letter
42. Media, <https://www.cmmedia.com.tw/home/articles/12950>.
43. Liu Dewei. (2000).Epistemology. Education Dictionary, National Academy of Education.
44. Liu Wenyu.(2019). The development of fact-checking in Japan and South Korea is facing the dilemma
45. of neutrality, topic selection, and definition.2019 Asia Fact-Checking Professional
46. Forum/Northeast Asia.
47. Marin Dell.(2019). Media Literacy and Fake News Dell: Media Literacy and Fake News. Digital.
48. Commons @ Touro Law Center, 2019.
49. Michelle, Jacquelyn.(2018). ABC-CLIO, LLC130 Cremona Drive, P.O. Box 1911 Santa Barbara,
50. California 93116-1911.
51. Malik, Gasser. (2013). The challenges of defining “news literacy.”Berkman Center for Internet &
52. Society. doi:10.2139/ssrn.2342313.

53. Michael, Tanya, Kristy.(2020).News literacy and Australian teachers: How news media is taught in
54. the classroom , Western Sydney University.
55. Michelle&Jacquelyu .(2018). The Keys to Combating Fake News.
56. Ministryof Education.(2014). Twelve-year National Basic Education Curriculum. Ministry of
57. Education.
58. Ministry of Education.(2014). "Technology Information and Media Literacy". The Ministry of
59. Education's twelve-year national education curriculum.
60. Ministry of Education.(2002). White Paper on Media Literacy Education Policy.
61. National Academy of Education.(2017). Instruction manual for topic integration. National Institute of
62. Education Curriculum and Teaching Research Center
63. W. James Potter.(2001). Media literacy (2nd ed.). Thousand Oaks, CA: Sage.
64. W. James Potter. (2004). Theory of media literacy: A cognitive approach. Thousand Oaks, CA: Sage.
65. W. James Potter. (2010).Argument for the Need for a Cognitive Theory of Media Literacy
66. W. James Potter. (2010). The State of Media Literacy. Journal of Broadcasting & Electronic Media/December
67. W. James Potter. (2010).Argument for the Need for a Cognitive Theory of Media Literacy
68. W. James Potter.(2018).Media Literacy. Sara Miller McCune founded SAGE Publishing, SAGE Publications,
69. Inc. Printed in the United States of America.
70. Richard Jackson Harris.(2009). A cognitive psychology of mass communication / Richard Jackson Harris. New York:
71. Routledge, 2009.
72. Shenghui, Xiuwen, Ziyi, Renqin,Ruicun.(2008). Combine the Internet to promote environmental
73. education research. The paper was published in the "2008 Taiwan Sustainable Development of
74. Environmental Resources" seminar organized by the Taiwan Association for Sustainable
75. Development of Environmental Resources, Taoyuan County. October 23, 2008.
76. Stephanie Craft, Seth Ashley, Adam Maksl, Erin Willis. (2010). "Media literacy and news credibility: Doesknowledge of
- media.
77. ownership increase skepticism in news consumers?" Journal of Media Literacy Education 2,
78. no. 1 37-46.
79. SethAshley, Adam Maksl, Stephanie Craft. (2013) . Developing a News Media Literacy Scale
80. Journalism & Mass Communication Educator 68(1) 7–21.
81. Sun Yuqing&Liu Yiting .(2019).National Security Crisis! The US-Germany-Farcen legislation puts
82. an end to fake news. Liberty Times.
83. UNESCO.(2020).Publications on Media and Information Literacy , Almaty Communication and

84. Information program.
85. UNESCO.(2017).Media and Information Literacy , UNESCO Almaty .
86. United Nations.(2015).United Nations Sustainable Development Summit 2015. Retrieved from
87. <https://sustainabledevelopment>.
88. UNESCO.(2013). "Global media and information literacy assessment framework: country readiness
89. and competencies" (Global media and information literacy assessment framework: country
90. readiness and competencies).
91. UNESCO.(2018). UENSCO Launch five laws of media and information literacy(MIL) , United
92. Nations Educational, Scientific and Cultural Organization.
93. Woolf, Nicky.(2016). How to solve Facebook's fake news problem: experts pitch their ideas. The
94. Guardian. 2016-11-11 [2017-01-15]. ISSN 0261-3077.
95. Woolf&Nicky.(2016). How to solve Facebook's fake news problem: experts pitch their ideas. The
96. Guardian. 2016-11-11 [2017-01-15]. ISSN 0261-3077.
97. Weng Xiuqi. (1992). Mass communication theory and empirical research. Sanmin Bookstore.
98. White Paper on Media Literacy Education Policy (2002). Ministry of Education.
99. Wu Cuizhen & Chen Shimin .(2007). Media Literacy Education. Taipei, huge current.
- 100.Yizhi, Zibin, Yuan.(2018). Understanding media literacy: Take college students' cognition of critical
- 101.consumption literacy as an example. Educational practice and research. 107, 1-38.
- 102.Yuhui & Xinghua.(2014).The cross-border practice of media professionals and educators-taking the
- 103.development of media literacy courses as an example. Curriculum and Teaching Quarterly.
- 104.Zhang Wuqi.(2010).Research on the integration of media literacy into the field of elementary school
- 105.social learning-from the perspective of critical pedagogy. Teaching Technology and Media, 94,
- 106.75-89.
- 107.Zhang Zichao.(2017). The significance of topic education and curriculum integration—Take care environmental education as an example. National Academy of Education, Education Pulse. 11. 002.
- 108.Berdimuratova, A. K., & Mukhammadiyarova, A. J. (2020). Philosophical and methodological aspects of the interaction of natural environment and man. International Journal of Pharmaceutical Research. <https://doi.org/10.31838/ijpr/2020.12.03.235>
- 109.Pirnazarov, N. (2020). Philosophical analysis of the issue of spirituality. International Journal of Advanced Science and Technology, 29(5).
- 110.Pirnazarov, Nurnazar; Eshniyazov, Rustam; Bezzubko, Borys; Alimov, Atabek; Arziev, Amanbay; Turdibaev, Alauatdin; ,Bachelor degree programs in building materials technology,European Journal of Molecular & Clinical Medicine,7,10,1780-1789,2021,

- 111.Nurnazar, Pirnazarov; ,Scientific and Philosophical Analysis of the Concept of «Spirituality»,Адам ?лемі,83,1,3-10,2020,"050010, Алматы ?аласы,«Философия, саясаттану политологии и религиоведения ..."
- 112.Алима, Бердимуратова; ,Хабар ?ам оны изетрле?дин философиялы? методологиялы? усыллары,Вестник КГУ,47,2,127-130,2020,Государственный университет имени Бердаха
- 113.Бердимуратова, Алима; ,ТІЛЕУБЕРГЕН Ж?МАМ?РАТОВ ШЫ?АРМАШЫЛЫ?Ы ФИЛОСОФИЯЛЫ? АНАЛИЗДІ? ОБЪЕКТІ РЕТІНДЕ,Адам ?лемі,85,3,19-27,2020,?аза?стан Республикасыны? м?дениет ж?не а?парат министрлігі А?парат ж?не ...
- 114.Алима, Бердимуратова; ,Хабар ж?мийети т?синиги: теориялы?-категориялы? анализле? тийкарлары,Вестник КГУ,47,1,144-149,2020,Каракалпакский государственный университет
- 115.Pirnazarov, Nurnazar; Utebaev, Madiyar; ,METHODS AND FORMS OF GREETINGS,Scientific enquiry in the contemporary world: theoretical basics and innovative approach [L 26],,,,2016,
- 116.Alimbetov Yu., Pirnazarov N; ,Culture: tradition and novation,East European Scientific Journal,54,2,38-41,2020,"Aleje Jerozolimskie 85/21, 02-001 Warszawa, Polska»"
- 117.Pirnazarov, Nurnazar; ,Structural model of spirituality as a philosophical phenomenon,Адам ?лемі,88,2,10-17,2021,
- 118.Pirnazarov Nurnazar Rashid uli. (2021). Spirituality of the Human Being as A Philosophical Problem. Zien Journal of Social Sciences and Humanities, 1(1), 15–20. Retrieved from <https://zienjournals.com/index.php/zjssh/article/view/>
- 119.Sultanov Atabek, & Pirnazarov Nurnazar. (2021). The Phenomenon of Mass Culture. Zien Journal of Social Sciences and Humanities, 1(1), 49–52. Retrieved from <https://zienjournals.com/index.php/zjssh/article/view/19>
- 120.Pirnazarov Nurnazar, & Sultanov Atabek. (2021). Mass culture: towards the essence of the concept. Journal of Pedagogical Inventions and Practices, 1(1), 40–43. Retrieved from <https://zienjournals.com/index.php/jpip/article/view/37>
- 121.Ul?, Pirnazarov Nurnazar Rahsid; ,INFLUENCE OF VIRTUAL REALITY ON THE SPIRITUALITY OF INFORMATION SOCIETY,Евразийский Союз Ученых,,2-2 (71),,2020,ООО «Евразийское Научное Содружество»
- 122.Pirnazarov Nurnazar Rashid ul?. (2021). Development Of a Person’s Spirituality in Dialogue with Another. Zien Journal of Social Sciences and Humanities, 1(1), 133–135. Retrieved from <https://zienjournals.com/index.php/zjssh/article/view/83>
- 123.Pirnazarov Nurnazar Rashid uli. (2021). Spirituality of the Human Being as A Philosophical Problem. Zien Journal of Social Sciences and Humanities, 1(1), 15–20. Retrieved from <https://zienjournals.com/index.php/zjssh/article/view/12>
- 124.Gerduang, Atiporn; Panwatanasakul, Chaipat; Nurnazar, Pirnazarov; ,THE DESIRABLE MANAGEMENT OF EDUCATION IN URBANIZATION AREA UNDER THE OFFICE OF NON-FORMAL AND INFORMAL EDUCATION IN BANGKOK THAILAND,????? (???),48,10,,2021,
- 125.Atiporn Gerduang ,Chaipat Panwatanasakul, Pirnazarov Nurnazar; ,The Development of Administrators Affiliated with the Office of Non-Formal and Informal Education (NFE),Review of International Geographical Education Online (RIGEO),11,9,250-258,2021,RIGEO