Developing Model of Media Literacy through Critical Analysis of Fake News

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Abstract

The convergence of media into digital media and the ease of accessing and producing news require new ways of approaching it or media literacy, mainly in dealing with fake news. This fake news has penetrated both uneducated and educated people such as college students. Some researches have been conducted to address media literacy and fake news separately. This research aims at addressing both issues by developing a model of media literacy through critical analysis of fake news. To design this model, research development method is used. Before the model of media literacy is constructed, a questionnaire was distributed to collect information on students' media literacy. Interestingly, the result showed that the students had some knowledge to access information or news from digital media, and were able to identify online advertisement and news. Theoretically, they could name some characteristics of credible news, yet they failed to recognize fake news and provide coherent reasoning. Instead of questioning the reliability of the news, they were not hesitant to share the news because they considered the news were beneficial for others and they mistakenly identified fake websites for official ones. Along with the result of comparative analysis between credible/real news and fake news, model of 6 C's of critical media literacy is proposed to address students lack of awareness in fake news. The model consisted of some activities covering investigating the Context, Credibility, and Construction of the news, as well as Corroborating, Comparing news from other credible sources before Creating news. Using this model, students would not only have knowledge about news reliability but also they would be able to do a critical analysis on the news, be aware of fake news and help to prevent the spread of fake news.

Keywords: Media Literacy, Digital Media, Fake News, A Model of Media Literacy

Abstrak

Konvergensi media menjadi media digital dan kemudahan mengakses dan memproduksi berita menuntut masyarakat memiliki cara-cara baru untuk memahaminya. Dengan kata lain, masyarakat kini membutuhkan literasi media untuk menyikapi arus informasi, terutama dalam menghadapi berita palsu. Berita palsu tersebut telah menyebar ke dalam masyarakat, baik masyarakat berpendidikan rendah maupun berpendidikan tinggi, seperti mahasiswa. Beberapa

penelitian yang telah dilaksanakan membahas literasi media dan berita palsu secara terpisah. Sementara itu, penelitian ini membahas kedua isu tersebut dengan mengembangkan model literasi media melalui analisis kritis terhadap berita palsu. Desain penelitian yang digunakan adalah metode penelitian pengembangan. Sebelum model media literasi disusun, kuesioner disebar untuk mengumpulkan informasi tentang literasi media mahasiswa. Uniknya, hasil kuesioner menunjukkan bahwa mahasiswa telah memiliki pengetahuan untuk mengakses informasi atau berita dari media digital dan mampu mengidentifikasi iklan serta berita daring (*online*). Secara teoretis, mahasiswa dapat menyebutkan sejumlah karakteristik dari berita-berita yang kredibel tetapi gagal mengidentifikasi situs-situs web yang palsu dan menganggapnya sama dengan situs web resmi. Berdasarkan hasil analisis komparatif di antara berita yang asli/kredibel dan berita yang palsu, model 6C sebagai literasi media kritis diajukan untuk mengatasi kekurangsadaran mahasiswa terhadap berita palsu. Model tersebut terdiri atas beberapa aktivitas yang meliputi penyelidikan tentang konteks (*Context*), kebenaran (*Credibility*), dan konstruksi (*Construction*) berita, serta menguatkan (*Corroborating*), membandingkan (*Comparing*) berita-berita dari berbagai sumber berita terpercaya sebelum menulis (*Creating*) berita. Dengan menggunakan model ini, mahasiswa tidak hanya mendapatkan pengetahuan tentang reliabilitas berita tetapi juga mampu untuk menganalisis berita secara kritis, dapat membedakan berita-berita palsu, dan dapat mencegah penyebaran berita-berita palsu.

Kata Kunci: Literasi Media, Media Digital, Berita Palsu, Model Literasi Media

INTRODUCTION

Media literacy is pivotal in responding to the rise of new digital media in which computing, communication, and content converge into one digital media where the distinction between the producers of the news and its consumers is not as transparent as it was before when news was printed or broadcasted in televisions and radios. To engage in this digital media, technical skills must be accompanied by other important skills in media literacy. Hobbs and Jensen (2009) explain that media literacy involves active inquiry and critical thinking in receiving and creating messages. Hobbs (2010) further states that skills in media literacy comprise of access, analyze and evaluate, create, reflect and act.

While it is easy to access and obtain information from digital media, this technological development is not always accompanied by the competence of technology users in assessing the credibility of information in news. Fake information has circulated among users of smart devices due to the lack of knowledge and ability to understand the media and how the media works.

The 2016 CIGI-Ipsos survey shows that as many as 65 percents of 132 million internet users in Indonesia believe the truth of information in cyberspace without checking and checking (Erdianto, 2017). This fake news is news that has been intentionally fabricated and distributed in order to deceive and mislead others so that they believe falsehoods or unverifiable facts (Mcgonagle, 2017). To respond to this problem, the purpose of the research is to develop a model of media literacy through critical analysis of fake news.

RESEARCH METHOD

Research development is used as a method of this study in order to design a model of media literacy. Research development method comprises the process of evaluating, developing and designing a model systematically in order to create an instructional and non-instructional model based on empirical data (Richey & Klein, 2007).

Before designing the model, a questionnaire was constructed and distributed to evaluate students' level of media literacy in relation to fake news and comparative analysis of fake news and real news was also conducted. Fourty six randomly selected students of English Literature and English Education study programme of Universitas Negeri Jakarta participated in filling out the questionnaire. In the questionnaire, students did two tasks related to identifying advertisements from non-advertisements or news, as well as identifying fake news. One hundred and thirty eight data of student responses in identifying ads and news, as well as 184 data of students responses in identifying fake news were collected and analyzed to provide empirical information to develop the model of media literacy.

RESULTS AND DISCUSSION

This section discusses the results of the students' media literacy assessments, features of credible/real news and fake news and model of media literacy.

Students' Media Literacy

To evaluate students' media literacy, students were required to identify advertisements, news items, and fake news. Results showed that 100% or all students were able to identify advertisements but only 67% students were able provide coherent reasoning by mentioning the elements of advertisement such as "*they are keywords that point out that it is an advertisement, which are "save $20 and LIMITED TIME ONLY*" and "*There is a price in it, with promotion code, make people want to buy, with brand.*" The rest 33% of the students provided incoherent or circular reasoning such as "*Ya ini sebuah iklan karena tampilannya dan juga isinya menunjukkan sebuah iklan…*" or they simply answered, "*it offers something*". Next, 59% of the students were not successful in identifying "sponsored content" from the native advertising, advertisements which sell or promote a product by posing as a news story. They misinterpreted the statistic provided in the native advertising as elements of news and were not aware that sponsored content belongs to the advertisement. Finally, only 20% of students were able to identify news items and mention elements of news. This suggests that while students could differentiate news from advertisements, they could not provide coherent reasoning as they did not correctly identify the elements of the news and advertisement in their answers.

To assess students' knowledge and ability to identify real news and fake news, students were required to answer questions about the credibility of news and to choose which of the four news that is worthy to share and why. This study indicated that students were able to name characteristics of credible/real news which can be seen from its source, its language, and supported by facts. In addition, they knew that they had to compare the news to other sources to check its credibility. However, when they were assessed to identify fake news, none of them were able to identify all

three fake news. Only 9% of students could identify two out of three fake news. Meanwhile, the majority of the students (61%) could not even identify one of the three fake news.

Real News versus Fake News

To find out the language difference of real news and fake news, the two news were analyzed using Linguistic Inquiry and Word Count (LIWC) that can be accessed from http://www.liwc.net/tryonline.php. LIWC is computation linguistics which analyze words in texts in terms of its social and psychological dimension. News of similar topics and about the same length was compared to find out linguistic differences of real news and fake news.

The two-news below can be easily differentiated from their appearance. Fake news tends not to follow the standard writing, in this case, it uses excessive full stops to indicate a pause and incorrect capitalization of acronym Aids, also the capitalization of the word "NOT" which will never be found in real news writing. Real news is compact and efficient in using words. While real news uses one sentence to include important information in its lead, fake news begins its story with similar content (who, what, when, why of the story) but with more sentences used. When the two-news include a direct quote, real news specifically names its source, fake news keep the ambiguity of the source until the end of the story.

Table 1. Comparative analysis of real news and fake news followed by the results of language analysis using LICW

Real News	Fake News
A third person has died in Australia after eating melon contaminated with listeria bacteria.	A 10 year old boy, had eaten pineapple about 15 days back, and fell sick, from the day he had eaten. Later when he had his health check done… doctors
Fifteen elderly people have now been infected in the outbreak, which is being linked to a melon-grower in the state of New South Wales.	diagnosed that he had AIDS. His parents couldn't believe it… Then the entire family under went a check-up… none of them suffered from Aids. So the doctors checked again with the boy if he had eaten out… The boy said "yes". He had pineapple that evening. Immediately a group from Malaya Hospital went to the pineapple vendor to check. They found the pineapple seller had a cut on his finger while cutting the pineapple, his blood had spread into the fruit. When they had his blood checked…the guy was suffering
The first two fatalities were from New South Wales, and the third victim was in the state of Victoria.	
The elderly, pregnant, and infants are being warned to avoid melon which has already been sliced.	
The 15 diagnosed with the infection had all consumed rockmelon, also known as cantaloupe, before falling ill. "People vulnerable to listeriosis should discard any rockmelon purchased before 1	from AIDS….. but he himself was NOT aware. Unfortunately the boy is suffering from it now. Please take care while you eat on the road side. Please forward this mail to your dear one.

March," Vicky Sheppeard, the director of communicable diseases for the New South Wales Health authority, said.

The contamination has been traced to a farm near the city of Griffith in New South Wales.

Rockmelons have been withdrawn from supermarket shelves across Australia following the outbreak, which began in January.

LIWC Results

Details of Writer: No Details
Date/Time: 28 August 2018, 4:17 am

LIWC Dimension	Your Data	Personal Texts	Formal Texts
Self-references (I, me, my)	0.00	11.4	4.2
Social words	3.97	9.5	8.0
Positive emotions	0.00	2.7	2.6
Negative emotions	1.99	2.6	1.6
Overall cognitive words	1.99	7.8	5.4
Articles (a, an, the)	10.60	5.0	7.2
Big words (> 6 letters)	26.49	13.1	19.6

The text you submitted was 151 words in length.

LIWC Results

Details of Writer: No Details
Date/Time: 28 August 2018, 4:11 am

LIWC Dimension	Your Data	Personal Texts	Formal Texts
Self-references (I, me, my)	0.00	11.4	4.2
Social words	16.46	9.5	8.0
Positive emotions	1.27	2.7	2.6
Negative emotions	3.16	2.6	1.6
Overall cognitive words	3.16	7.8	5.4
Articles (a, an, the)	10.13	5.0	7.2
Big words (> 6 letters)	14.56	13.1	19.6

The text you submitted was 158 words in length.

Further study to find out the language used showed that fake news used a higher frequency of social words and emotion words, both positive and negative emotion compared to real news. The use of higher social words indicates that the text makes more reference to other people, such as the words *he, they, parents, family* in fake news and *elderly, pregnant, and infants* in real news. Real news used fewer emotion words and cognitive words with the same frequency 1.99 compared to fake news which has 4.43 emotion words comprising 1.27 frequency of positive emotions, and 3.16 frequency of negative words. It suggests that although the two-news inform the contaminated fruits which can affect health, real news use of negative emotion words is lower than that of fake news. It indicates that real news focuses on the information rather than trying to affect readers' emotion. This result also implies that it is important to examine the construction of the news in terms of its format (appearance), and the language uses to identify fake news.

Model of Media Literacy: 6C's of Critical Media Literacy

From the result of the assessment of students' media literacy and comparative analysis of real news and fake news, a model of media literacy called 6 C's of critical Media Literacy is proposed. This model adopted 5 C's of critical consuming by Spencer (2016) which stand for Context, Credibility, Construction, Corroboration, Compare and is adapted by adding one more "C" to mean "Create" in which the students have to create a review from the comparison of the news.

The model is suggested to be able to address students' inability to provide coherent reasoning in their selection of the news. First of all, upon reading news such as fake news of HIV contaminated pineapple, looking at the Context of the

news, students should have sensed the peculiarity of the news as it was not from any website but circulate among watts app users with no reference to other sources. In looking at the context of the news, several questions related to the time and source of the news should be clear at the beginning, and whether the news has been changed since then.

Most students were able to mention that real news must be credible and that the credibility comes from credible websites, facts, and language. However, they were less aware that fake websites can resemble official ones with a very slight difference such as when they incorrectly identified www.garuda-indonesıa.com as the official website of Garuda which only differs in the letter "ı" from the official one, www.garuda-indonesia.com. Paying attention to the credibility of the news, students would learn not only that real news must come from a credible source, but also they would investigate the credibility of the news by paying more attention to fake news website address which might be slightly different from the official ones. Questions such as whether the site has reputation for journalistic integrity, whether the author cites a credible source, and whether it is an advertisement which looks like a news story can also be addressed in this stage.

Examining the construction of the article helps students to be more critical in analyzing the content of the news. They can investigate the bias of the news, whether there are loaded words or propaganda techniques and whether the news is mainly facts or opinions. In addition, the appearance and language of the article can be further investigated to compare the construction of the news. For example, comparing fake news and real news as mentioned earlier.

Besides investigating the content, credibility, and construction of the news, students can also add more evidence to support their evaluation of the news by corroborating the information with other credible news sources. They can make sure that the claim or news is also discussed by other credible sources. If there is only one source discussing the news or claims, it might not be true. They can also search websites which can verify the news' credibility, such as www.snopes.com, www.factcheck.org, and www.turnbackhoax.id.

Sometimes, people tend to believe the news not because the news is credible but because the news meets their expectation. In order to avoid that, comparing news to other news sources enable us to get various perspectives. Therefore, we can find other credible sources from other areas of ideological or political stance to get a different and bigger picture of the topics being discussed or what's actually happening.

Having investigated the news in terms of its content, credibility, perspective, appearance, and language, students can also contribute as responsible netizens by creating a review or a clarification of the news in order to prevent more fake news shared. For example, they can then review the news by providing coherent reasoning based on its content, credibility, construction, and supported with data or explanation from other sources when they corroborate and compare the news.

CONCLUSION

This study is preliminary research to design model of literacy media. Based on the results of the assessment on students' media literacy and comparative analysis of fake news and real news, 6 C's model of critical media literacy is proposed to increase the students' awareness, and competence in detecting fake news, as well as to enable students to provide coherent reasoning in evaluating the news. This model can be further elaborated in the form of teaching and learning activities in the classrooms. Therefore, further study will be mandatory to see the effectiveness of this model in developing students media literacy.

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