

## **SPOT AND STOP PROJECT IN COUNTERING THE USE OF FAKE NEWS: BASIS FOR INTERDISCIPLINARY LATERAL READING ENHANCEMENT PROGRAM**



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### **ABSTRACT**

The main thrust of this action research was to evaluate the intervention trial called Spot and Stop Project as to enhancing learners' fact-checking skills— skills necessary to counter fake news. This study used mixed methods approach particularly of Convergent Parallel Design. The intervention trial in this study was executed through several stages, in which parallel quantitative and qualitative data were gathered, analyzed, and merged. Thirty (30) participants were selected from HUMSS 12 learners at Biñan Integrated National High School through purposive sampling. To assess the fact-checking skills, diagnostic and summative tests scores were obtained; and two-part focus-group discussions were facilitated. Quantitative findings showed the mean of 1.68 assessed as “Emerging” for Diagnostic Test; while 2.44 assessed as “Mastery” for Summative Test. Dependent samples t-test revealed that there was a significant difference between the results. Furthermore, qualitative findings revealed that before the intervention, learners had emerging verification skills, concerned on the credibility of the sources, and been practicing vertical reading. But after the intervention where lateral reading and other fact-checking strategies were taught, upturn and upskill in fact-checking as well as the applicability of lateral reading to real-world appeared as emerging themes. Quantitative and qualitative results were integrated thereafter. Integration showed how quantitative findings were triangulated, elaborated, and expanded by qualitative findings and the other way around. Overall, it can be concluded that the intervention trial significantly improved the fact-checking skills of the learners. Afterwards, this intervention trial study was used as basis of a proposed interdisciplinary lateral reading enhancement program.

**Keywords:** *Fact-Checking, Lateral Reading, Fake News, Enhancement Program*

## INTRODUCTION

In recent decades, digital technologies have been giving people easier and easier access to information. Concurrently, people tend to believe what seems to be interesting and get easily hooked to captivating infographics, articles and the like. Hence, people have become susceptible to dealing with and using fake news. According to Allcott and Gentzkow (2017) as cited in Kalsnes (2018), fake news are stories or articles that are intentionally and verifiably false, thus could mislead readers. Many consumers nowadays globally watch, listen, and hear news from their preferred source without taking into consideration how reliable and truthful it can be.

Recent studies confirmed how the culture of spreading of fake news is getting widespread globally (Guanah, 2018; Francheschi & Pareschi, 2021; Watson, 2021). In addition, Tedros Adhanom Ghebreyesus, director-general of the World Health Organization (WHO) pointed out that the world is not just fighting a pandemic but also an infodemic, and that the spread of false information is as a matter of fact spreading faster than coronavirus (Lancet, 2020 as cited in Siar, 2021). With these, it could be said that fake news is indeed becoming a serious global public concern.

The Philippines, like any other countries in the world, suffers from this phenomenon as well. In fact, using and propagating fake news became a trending topic during its recent election season (Eusebio, 2022). In addition, the national Social Weather Survey (SWS) of December 12–16, 2021 revealed that 69% of adult Filipinos indicated that the problem of fake news in media is serious. Meanwhile, the percentage of those who find difficulties to spot fake news was dominated by young learners and in fact highest among non-

elementary graduates (59%), followed by elementary graduates (58%), junior high school graduates (48%) (SWS, 2022). It would be alarming if the learners would continue adapting to this kind of practice as this can potentially intensify the explosive growth of fake news on their generation. Additionally, spreading false information, unverified reports and other forms of disinformation is punishable by law (Republic Act 10175 Anti-Cybercrime Law).

Likewise, this culture became observable to many learners of the teacher-researchers themselves. It was observed many times that their learners use fake news to support their arguments whether in oral or in written form. In addition, it was also directly observed by the teacher-researchers that many learners in their classroom are usually depending and defending their arguments based on a shared post from social media without counter checking how factful the evidence on the site is. Learners rely on the videos and texts if it sounds and appears convincing.

Meanwhile, an educational initiative called “The Civic Online Reasoning Program” by Stanford History Education Group (SHEG) came to the attention of the teacher-researchers. Since their establishment in 2014, this American scholarly group has been educating people about lateral reading—a strategy for investigating the people behind an unfamiliar online source by leaving the webpage and opening a new browser tab to see what trusted websites say about the unknown source (SHEG, 2016). This has been their attempt to counter the seemingly inevitable spread of fake news.

Moreover, Starke (2020) argued that readers are truly fact checking the information in the articles and pieces they are reading when doing lateral reading. However, some are fact-checking only through vertical reading.

Starke (2020) clarified that vertical reading takes place when a reader is simply looking at one source to gather information, often relying on face value to determine its legitimacy, and failing to engage in deeper reading. He further argued that while vertical reading is often helpful to readers when it comes to recognizing, reading, and evaluating sources, the benefits of lateral reading are far greater especially in recognizing bias, verifying the sources, and confirming the validity.

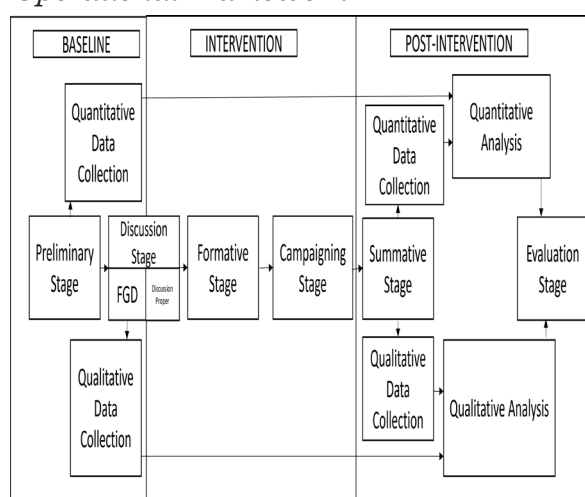
Considering the above-mentioned facts, the teacher-researchers came up with the idea of helping learners survive from the problematic phenomenon of fake news through action research. Consequently, teacher-researchers designed an intervention study that aimed to help their own learners counter the use of fake news through lateral reading. It was hoped that this study would be helpful and deemed necessary not only to their studies but also in the long run as dealing with information is not exclusive to schooling. This intervention trial study was conducted at one graded level only and that was Grade 12 Humanities and Social Sciences (HUMSS) learners at Biñan Integrated National High School (BINHS). Afterwards, the results of this study were looked forward as the basis for a wider program, which would be a school-based interdisciplinary enhancement program that would enhance lateral reading—the most recommended fact-checking strategy by experts—among HUMSS students of both levels at BINHS.

Moreover, the pilot intervention trial used in this study was titled “Spot and Stop Project”. This project was inspired from the initiatives made by Stanford History Education Group (SHEG). The trial was implemented and integrated through one of the subjects offered in Grade 12 HUMSS last semester S.Y. 2021-2022, Media and

Information Literacy (MIL) as the phenomenon of fake news is very much relevant to competencies of this subject across the quarters. As stated by Siar (2021) on her study, countering fake news through integration in basic education curriculum is highly recommended as it can ensure sustained and lasting results.

The Spot and Stop Project was composed of several stages as shown in the figure below.

**Figure 1**  
*Operational Framework*



In the Baseline Phase, the participants of this pilot study were recruited during the preliminary stage through a selection process and Diagnostic Testing. After that, the participants underwent Discussion Stage where they participated in a Focus-group discussion (FGD). FGD was conducted to assess participants’ experience in dealing with sources and fake news before being involved in the intervention.

During the Intervention Phase, the participants were taught about spotting fake news through the most recommended fact-checking strategies by SHEG and other experts— lateral reading— coupled by other fact-checking strategies such as doing Reverse Image Search and using Wikipedia as a source.

It can be noticed that aside from the expert-recommended lateral reading, Wikipedia and Reverse Image Search were also taught because like what Caufield (2017) pointed out: Wikipedia is only broadly misunderstood by teachers and learners alike while in fact it is often the best source to get a consensus viewpoint on a subject; and Google Reverse Image Search is also one good way of getting to the origin of the source. After the discussions, two formative assessments were administered. These assessments lasted for two weeks and were integrated into the regular lessons in their subject MIL. This stage essentially helped the participants practice the skills that they have just learned. To help learners continuously improve, regular feedback was given to them. Afterwards, the Campaigning Stage was facilitated by the teacher-researchers. The participants were grouped into five and were asked to develop advocacy materials that calls for the stop of using fake news. Using these advocacy materials, the participants campaigned against the use of fake news on their own class group online space for the subject MIL. This campaign called “STOP the FAKE” was used by the participants to demonstrate not only their newly acquired knowledge and skills but also their recognition of the importance of combating information disorder. As they shared their materials, they also allowed other members of the online space to interact. As recorded on the filed notes of the teacher-researchers, other learners seemed enlightened because of the campaign.

Lastly, the Post-Intervention Phase was conducted. Here, all the participants underwent Summative Testing. After this, the priorly-chosen learners had once more participated in an FGD with the teacher-researchers. The discussion this time revolved only on the participants’ experience on Spot and Stop Project. After all of these, data

gathered throughout the phases were undergone careful analysis and evaluation to assess whether the trial was achieving its aims.

## **METHODOLOGY**

This study used mixed methods approach, particularly convergent parallel design combining principles of pre-experimental and qualitative descriptive designs. Mixed methods approach was used as the teacher-researchers believed that this would be the most appropriate way in evaluating the intervention. This intervention trial, possessing pre-experimental elements, lacked comparison group. It only employed one group pretest-posttest design. Without something to compare to, it would be difficult to assess the significance of an observed change in the trial. However, Creswell and Creswell (2018) pointed out that mixed methods would be suited if one data source may be insufficient. Hence, qualitative descriptive design was used to complement, elaborate, and expand the limitations of the study’s pre-experimental feature.

Furthermore, Convergent Parallel design involves collecting and analyzing two separate databases— quantitative and qualitative— and then merges the two for the purpose of comparing the results (Creswell & Clark, 2018). Following the convergent-parallel design, all parallel data collected from the baseline until post-intervention had undergone separate quantitative and qualitative analysis. In analyzing data in quantitative strand, descriptive and inferential statistics was used; while in qualitative, thematic analysis was employed. Afterwards, both findings were merged, converged, and integrated. All findings were used to evaluate the intervention.

Meanwhile, the population of this study was the Grade 12 HUMSS learners



at BINHS S.Y. 2021-2022. As for the facilitators of the intervention program of this study, it was composed of the three teacher-researchers themselves, two (2) of whom are Media and Information Literacy teachers and one (1) is a Philippine Politics and Governance teacher.

Since this study involved a convergent parallel design, it was composed by two strands— quantitative strand and qualitative strand. Nevertheless, two strands used purposive sampling in determining their respective samples. However, these two samples had different sizes— the qualitative sample was much smaller than the quantitative one. Creswell and Creswell (2018) stated that size differential would not be a problem especially if the intent is to compare and to synthesize results into a complementary picture about the phenomenon.

In the quantitative strand of the study, it was participated by thirty (30) students while in the qualitative strand, it was composed of twelve (12) students drawn from quantitative participants. Qualitative sample was drawn from the quantitative sample so that the findings will be parallelly compared and corroborated, and thus strengthened (Creswell & Creswell, 2018).

To specifically determine the participants, three selection criteria was set: 1) low level of lateral reading skills; 2) willing to participate in the intervention and permitted by the parents; and 3) consistently compliant learners. In assessing the level of fact-checking skills, a diagnostic test was administered to the 468 total population of Grade 12 HUMSS students of BINHS. But in congruence with the second and third criteria, only consistently compliant learners with accomplished and submitted informed consent were allowed to join the intervention trial. The 12 most articulate of these 30

participants were purposefully chosen to be part of the qualitative strand. Rich data was expected from them due to their articulating characteristic. Qualitative studies require a minimum sample size of at least 12 to reach data saturation (Clarke & Braun, 2013; Fugard & Potts, 2014; Guest, Bunce, & Johnson, 2006 as cited in Vasileiou et al., 2018).

In the quantitative strand of this study, fact-checking skills before and after the intervention trial among the participants were assessed. The data assessed were obtained from the Preliminary Stage (Diagnostic Test) and Summative Stage (Summative Test), respectively. Photo-elicited Diagnostic Test and Summative Test were used. The tests were distributed and collected via google forms. Since the nature of the assessment requires verification of other online sources, the participants were allowed to open multiple websites while answering the tests.

The tests and the rubric used for these tests were somewhat similar to the study of Stanford Education History Group titled Students' Civic Online Reasoning (Breakstone et al., 2019), however these were localized and contextualized. Each answer per item were checked based on the adapted scoring rubric from Breakstone et al. (2019) as shown in Table 1.

**Table 1**  
*Scoring Rubric for Diagnostic and Summative Tests*

Category	Description	Numerical Value
Mastery	The learner determines the credibility of the source and provide a clear justification	3
Emerging	The learner determines the credibility of the source but cannot clearly justify the answer	2
Beginning	The learner is not able to determine the credibility of the source and cannot give a clear justification either	1

The results of the class performance were scaled and verbally interpreted using the same categories used in Rubrics as shown below.

**Table 2**

*Scoring Scale for Diagnostic and Summative Test Results*

Level	Score Range
Mastery	2.34- 3.00
Emerging	1.68- 2.33
Beginning	1.00- 1.67

Meanwhile, in the qualitative strand, two-part focus-group discussions (FGD)— one at the baseline (first phase of the Discussion Stage) and the other at the post-intervention phase (Summative Stage) of the intervention— was employed to collect the qualitative data. Both FGDs were digitally recorded for easier verbatim transcription and held via google meet since face-to-face classes was still not regularized. FGD is recommended when the rich quality of respondent interactions is needed or are exploring common trends (Azzara, 2010). Since the study is a convergent parallel one, the questions to be asked in this strand are complementary to what the quantitative strand wants to determine. In the FGDs, two sets of researcher-made semi-structured interview questions were used.

Both quantitative and qualitative data were treated equally in this study. Quantitative data were undergone analysis using descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (dependent samples t-test) while qualitative data were undergone the process of thematic analysis— reading and re-reading to coding to categorization up to generating themes. After separate analyses, these data were merged and triangulated to obtain meta-inferences. Meta-inferences included

area of convergence, area of complementarity, and area of expansion. As provided in Creswell and Clark (2018), area of convergence shows corroboration by comparing qualitative data with the quantitative results; area of complementarity shows elaboration, illustration, enhancement, and clarification of the findings from one strand with the other strand; and area of expansion expands breadth and range of a study by using multiple strands for different study components.

To ensure the validity, the tests and interview questions had undergone checking and validation by a Social Science Master Teacher. The trustworthiness of qualitative findings was also enhanced through the process of member checking and triangulation (Creswell & Creswell, 2018). In member checking, the verbatim transcript, thematic charts, and interpretation were sent to the participants for them to check if the interpretation is accurate and more of them rather than more of the teacher-researchers. Meanwhile, themes and sub-themes that emerged were triangulated by quantitative data and findings.

Before gathering any data, the teacher-researchers ensured that the permission of the authorities is granted first. Also, informed consent sheets were distributed to and collected back from the parents and participants themselves. To further protect the identity of the learner participants, their anonymity was maintained in the results section. Instead of real name, participant numbering was used.

## RESULTS

Following the design of this study, the results were obtained from two strands of data collection and data analysis— quantitative strand and qualitative stand.

## Research Question Number 1: How do fact-checking skills among participants be described before the implementation of the Spot and Stop project?

### Quantitative Strand

Table 3 shows the level of fact-checking skills of participating HUMSS 12 learners based on the results of the Diagnostic Test. By average, the performance of the learners was verbally interpreted as “Emerging”. Meanwhile, it also indicates that most of them also fell under this category.

**Table 3**  
*Level of Fact-Checking Skills based on Diagnostic Test Scores*

<b>f</b>	<b>%</b>	<b><math>\bar{x}</math></b>	<b>SD</b>	<b>VI</b>
12	40.0			Beginning
13	43.4			Emerging
5	16.6			Mastery
30	100.0	<b>1.68</b>	<b>0.56</b>	<b>Emerging</b>

Legend: 2.34- 3.00 Mastery 1.68- 2.33 Emerging 1.00- 1.67 Beginning

These finding imply that the students were already familiar on how to do fact-checking but lack expertise. In addition, it is noticeable that “Beginning” learners were just a step closer to the number of “Emerging” ones while learners under “Mastery” got the lowest percentage. These findings have complementarity to SWS (2021) which revealed that the percentage of those who lacks mastery in spotting fake news is high among junior high school completers. This is alarming considering that the learners are already in their senior year in basic education and about to face the real-world. Possible

repercussions related to infodemic would just intensify if findings like these are left unaddressed. This would only mean that an intervention program that would enhance skills in countering the use of fake news is but necessary among them.

### Qualitative Strand

Concerning the first research problem, three themes emerged from the two-part FGD conducted.

The first theme was **“Emerging Verification Strategies”**. This suggests that fact-checking is something that learners were familiar about even before the intervention program. The learners already had recognized the need to fact-check and had employed fact-checking strategies as they evaluate sources. These strategies, as suggested by the sub-themes, were cross-checking and checking the author behind the information—similar practices done by fact-checkers (Wineburg and McGrew, 2018). However, this theme that emerged from FGD cannot guarantee that these strategies are exactly the ones they employed before the intervention program. With this, it can be said that an intervention program that would improve their fact-checking skills is still needed.

Moreover, the second emerging theme was **“Concern about the Credibility of the Sources”**. This theme describes how the credibility of the source of the information the learners use is of their concern. It can be examined through the interview transcripts that the learners were generally suspicious to publicly available and accessible information including Wikipedia and were foremost looking into the reliability of the information. With this, it can be said that even before the intervention proper, the learners were already into the credibility— a good mindset any fact-

checkers should have (Adhikari, 2019). However, too much suspicion and distrust, especially when becoming unreasonable, could also lead them away from facts. For instance, Caufield (2017) argued that Wikipedia is only broadly misunderstood by teachers and learners alike while in fact it is often the best source to get a consensus viewpoint on a subject. With this, redirection through an intervention program may help them identify which information should and should not be trusted. Since the learners were already into the credibility of the sources, intervention program for enhancing fact-checking skills could be engaging for them.

Meanwhile, the third theme was **“Practice of Vertical Reading”**. This theme reveals that learners were employing vertical reading— a fact-checking strategy not recommended by professional fact-checkers. Starke (2020) in fact explained that vertical reading takes place when a reader is simply looking at one source to gather information, often relies on face value to determine its legitimacy, and fails to engage in deeper reading. Thus, it does not always provide the most comprehensive, valuable, or reliable information. With this practice, learners are still most likely to be victims of fake news. This calls for a need for an intervention program that would teach them what practice should be practiced when fact-checking sources, otherwise, they would remain as vertical readers.

### **Research Question Number 2: How do fact-checking skills among participants be described after the implementation of the Spot and Stop project?**

#### **Quantitative Strand**

Table 4 shows the level of fact-checking skills of participating HUMSS 12 learners based on the results of the

Summative Test. By average, the performance of the learners was assessed as “Mastery”. Meanwhile, it also indicates that most of them are reclassified under this category after the intervention program.

**Table 4**  
*Level of Fact-Checking Skills based on Summative Test Scores*

<b>f</b>	<b>%</b>	<b><math>\bar{x}</math></b>	<b>SD</b>	<b>VI</b>
4	13.4			Beginning
7	23.3			Emerging
19	63.3			Mastery
30	100.0	<b>2.44</b>	<b>0.65</b>	<b>Mastery</b>

Legend: 2.34- 3.00 Mastery 1.68- 2.33 Emerging 1.00- 1.67 Beginning

The results imply that after undergoing Spot and Stop project, most of the learners became exemplary skillful in countering the use of fake news. This finding is similar to the study of Brodsky and Brooks (2021), which revealed that after undergoing to an intervention program that uses lateral reading to fact-check information, college students were able to accurately assess the trustworthiness of the information, thus obtained higher scores in posttest regarding this.

#### **Qualitative Strand**

Concerning the second research problem, three themes also emerged from the post-intervention FGD conducted.

The first emerging theme was the **“Upturn in Fact-Checking”**. This theme reveals how Spot and Stop Project helped the learners leveled-up their skills when it comes to fact-checking. As apparent on the interview transcripts, learners became critical in verifying the sources and were able to shift their fact-



checking strategy from vertical reading to lateral reading upon realizing the importance of the latter. According to Starke (2020) readers are truly fact checking the information in the articles and pieces they are reading when doing lateral reading. In addition, Starke (2020) pointed out that while vertical reading is often helpful to readers when it comes to recognizing, reading, and evaluating sources, the benefits of lateral reading are far greater especially in recognizing bias, verifying the sources, and confirming the validity.

The next emerging theme was **“Upskill in Fact-Checking”**. This theme presents how learners were able to acquire additional skills in fact-checking after undergoing the intervention program. According to the testimonies of the participants, learners themselves were able to learn and thus utilize Reverse Image Search and Wikipedia in fact-checking— in doing lateral reading to some extent. This is a good finding as according to Caufield (2017), utilizing Google Reverse Image Search is one way in getting to the origin of the source and thus confirming its trustworthiness; and Wikipedia can be the best source of introduction to a subject on the web especially when approached with caution because its community has strict rules about sourcing facts to reliable sources. In addition, using Wikipedia as a resource in doing lateral reading are advisable according to Stanford History Education Group as stated on their official page for Civic Online Reasoning.

Lastly, the theme **“Fact-Checking through Lateral Reading in Real-Life”** also emerged. This theme describes how lateral reading skills became relevant and thus can be and was applied by learners after the intervention program. It can be examined in the FGD that the learners were able to utilize lateral reading in multiple ways such as in social media, academics, and even on daily personal endeavors. With this, it

can be said that through Spot and Stop Project, the learners were not just able to acquire the skills but also apply it in real-life. This finding may also mean learners’ readiness and capability to counter fake news not only in academic realm but also outside the school. This is somewhat in congruence to Brodsky et al. (2021) which concluded that teaching lateral reading can help prepare students for navigating today’s complex media landscape.

### **Research Question Number 3: Is there a significant difference in the fact-checking skills among participants before and after the implementation of Spot and Stop Project?**

Table 5 shows the comparison of fact-checking skills among participants before and after Spot and Stop Project using Diagnostic and Summative Test scores. The probability value is .000 which is less than the level of significance at .05. With this, it can be said that there was significant difference in the fact-checking skills of the learners based on their performance before and after the intervention program.

**Table 5**  
*Comparison of Fact-Checking Skills based on Diagnostic and Summative Test Scores*

Test	Paired Differences				Remarks
	Mean	SD	t	p value	
Pre & Post	.76190	.4569	-9.133	<0.01	Significant

This result suggests that the learners did not just obtain high scores on their Summative Test, but their fact-checking skills significantly improved after undergoing the online fact-checking enhancement program. This finding generates similar finding with

Breakstone et al. (2021) which revealed that college students improved significantly from pretest to posttest after learning fact-checking strategies mainly lateral reading in an online program.

**Research Question Number 4: How do the themes that emerged from two-part focus-group discussion help explain the difference in the fact-checking skills among participants before and after the implementation of Spot and Stop Project?**

To explain the difference in the fact-checking skills of the participants before and after the intervention trial, cross-case analysis of emerging themes that describes learners' fact-checking skills before and after the implementation of Spot and Stop Project was conducted. After comparing the two sets of themes, it was detected that: 1) positive shift in fact-checking manifested among learners; 2) learners have acquired additional fact-checking strategies; and 3) learners have gained trust to sources they previously doubted.

By examining themes **Emerging Verification Strategies** and **Concern about the Credibility of the Sources**, it can be said that learners already had early manifestations of fact-checking skills even before participating in Spot and Stop project; however, the theme **Practice of Vertical Reading** suggests that learners employ fact-checking strategies not recommended by experts. But upon comparing these themes to the other set of themes, particularly of **Upturn in Fact-Checking** and **Fact-Checking through Lateral Reading in Real-Life**, it was found out that learners have shifted their old practice of fact-checking to lateral reading. Vertical reading is now replaced by the fact-checking strategy highly recommended by experts.

Moreover, by comparing the themes **Emerging Verification Strategies** and **Upskill in Fact-Checking**, it can be said that learners acquired additional helpful strategies in fact-checking such as Reverse Image Search and Using Wikipedia. Reverse Image Search were in fact not mentioned by the learners during the pre-intervention FGD. Meanwhile, learners confessed that Wikipedia (as mentioned in the theme **Concern about the Credibility of the Sources**) was hardly trusted before they participated in the program.

Learners' change of perception as regards Wikipedia was also justified upon comparing **Concern about the Credibility of the Sources to Upskill in Fact-Checking**. Learners were generally doubtful to Wikipedia; however, learners recognized the benefits of Wikipedia after the intervention program. In fact, learners testified that they will be using it moving forward. This is somewhat in contrary to Brodsky et al. (2021) which reported on their study that although students use Wikipedia more often to fact-check information after an intervention program, they trust in Wikipedia did not differ significantly.

## **DISCUSSION**

Based on the results, it can be said that the quantitative results and qualitative results had converged, elaborated, and expanded each other. For instance, the theme **Emerging Verification Strategies** corroborated the average result of Diagnostic Test of the participants. In fact, the result of class performance verbally interpreted as "Emerging" can be supported by the first emerging theme which suggests that learners were employing practices such as cross-checking and checking the author behind the information. These practices were aligned to the standards set in rubrics used by the teacher-researchers in checking the

Diagnostic Test. With this, it can be claimed that the implication which says that the learners were already familiar on how to do fact-checking even before the intervention program is more strengthened.

Meanwhile, the mean assessed as **“Emerging”** does not imply expertise in fact-checking among the learners. In addition, the number of **“Beginning”** learners were a step closer to the number of **“Emerging”** learners while **“Mastery”** learners were very few. Nevertheless, these findings were found complementing with the themes **Concern about the Credibility of the Sources** and **Practice of Vertical Reading**. The two themes elaborated the reasons behind why participants failed to achieve high scores in Diagnostic Test. Although learners were generally suspicious to publicly available and accessible information, they still failed to verify properly and thus justify some items as they did not consider and visit even credible sources such as Wikipedia. Learners’ practice of vertical reading such as reading one source only, relying on the face value of the source to determine the legitimacy, and not doing deeper reading just illustrated the process that leads them to get low scores.

Moreover, the theme **Upturn in Fact-Checking** converged to all quantitative findings obtained from Summative Test Scores. As a matter of fact, this theme validated the class average assessed as **“Mastery”** as it suggests that learners became critical in verifying the sources and were able to adapt to lateral reading— fact-checking strategy recommended by expert used as the basis of the rubrics for Summative Test.

In addition, area of complementarity was found upon

integrating the themes **Upturn in Fact-Checking** and **Upskill in Fact-Checking** to all quantitative findings. These themes elaborated what’s behind the favorable scores of the learners— learners have adapted to lateral reading, and they have acquired and been utilizing additional fact-checking strategies such as Reverse Image Search and Using Wikipedia. These upgradation in fact-checking led most of the learners to get high scores.

Furthermore, the theme **Fact-Checking through Lateral Reading in Real-Life** expanded the quantitative results. The theme might not have direct attributions to the scores in Summative Test, but it says something about how learners would fact-check even after the intervention program. As suggested by this theme, learners would be employing lateral reading in real-life in multiple ways such as in social media, academics, and even on daily personal endeavors. With this, it can be said that learners are now ready to apply the learnings and counter the use of fake news even in real-world.

In terms of significant difference testing, the quantitative findings both converged and complemented to the qualitative findings categorized as **Positive Shift in Fact-Checking Practices** and **Acquisition of Additional Fact-Checking Strategies**. It can be remembered that before the intervention, learners were scoring low because of practice of vertical reading combined with slight manifestation of lateral reading. But as learners learned lateral reading and additional fact-checking strategies, their scores changed too and in fact resulted to significant difference. Therefore, it can be drawn that the significant difference can be accounted to and explained by

this shift and acquisition of additional fact-checking strategies as they participate in the intervention program. Moreover, both these qualitative and quantitative findings imply that improvement in fact-checking skills was evident among learners.

On the other hand, the category **Gained Trust to Previously Doubted Sources** expanded the t-test results. The significant difference result is only limited to accounting to the improvement of knowledge and skills of learners when it comes to fact-checking. But upon examining, learners did not just improve in terms of knowledge and skills but also display changes in terms of attitude. In fact, they were able to trust sources now they have previously avoided and doubted such as Wikipedia.

Based on the findings of the study, the researchers came up with the proposed enhancement program that aims to develop fact-checking skills among learners. Since the pilot intervention program trial yielded favorable outcomes, many aspects of the proposed program will be based on this. However, low key result areas and feedback by participants themselves were also considered in building up the proposal.

The proposed program shall be adapting the name of the pilot intervention trial though modifications are added. With this, it will then be called as **“Spot and Stop Project 2.0: Interdisciplinary Lateral Reading Enhancement Program”**. This program is looked forward to possessing the following salient features: fosters lateral reading, interdisciplinary, and combats fake news. The lateral reading and combatting the fake news were apparently based on the emerging central themes of this study. As to its interdisciplinary feature, the study may

had been conducted during the offering of MIL, however as findings suggested, MIL is not the only subject area where this study may support and be applied in. To help learners combat fake news not only in one subject but across different subject areas and even in real-life, it was decided to turn the project into an interdisciplinary one.

Hence, the general aims of the proposed program are as follows:

1. To enhance fact-checking skills of learners through lateral reading.
2. To instill to learners the importance of countering the fake news.
3. To help learners advocate for countering the fake news through lateral reading.

Meanwhile, the activities to be taken to realize the set objectives are as follows:

1. Preliminary Phase (Recruitment of Participants)
2. SPOT Phase
  - 2.1 Discussion
  - 2.2 Spot-the-Fake Activity
3. STOP Phase
  - 3.1 Developing advocacy materials
  - 3.2 Stop-the-Fake Campaign
4. Evaluation Phase
5. Recognition of Participation, Outstanding Participants

The activities to be done are highly similar to the ones implemented in the intervention trial as these proven their contributory roles in improving learners' fact-checking skills as suggested by the findings. But unlike the trial, this proposed program is expected to be implemented face-to-face considering the feedbacks of the previous participants and the current context of education system. This time around, it



will be opened to all HUMSS learners regardless of grade level.

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