

The Foundation of I-Search

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ACKNOWLEDGMENT

Everything comes with its intention and I appreciate each opportunity I have had in the process of doing this action research. First, I would like to express my gratitude to the English Education Resource Center for recommending that I join the 2013 online program held by University of Oregon, the program that instructed me how to develop PBL lesson plans and introduced me to some technology that I could apply in my classroom. And Josh Lee, my study buddy in the online program, is the person I feel grateful to because he broadens my horizons on how technology integrates into English teaching. Then, I would like to thank my colleague Ching-Li Huang (Lily) for her kindness and generosity in assisting me to generate the initial stage of developing this action research. This was our first time working out how to broaden our students' horizons by incorporating the Internet resources into English teaching. But for Lily's help, I would not have clearly realized how to lead one effective lesson plan with an Internet search, the lesson plan that opens one door for our students to have more dynamic learning. Pearl Chang is also the one I'd like to appreciate. Because of her encouragement, I bravely set out this research journey, the journey that inspires me not to simply be one English teacher but to be one insisting researcher that constantly explores what elements we teachers can do to help students' learning. I'd also like to express my gratitude toward Prof. Hsi-Nan Yeh, who always reminds me of the importance of being one English teacher when doing the research. With these key persons' assistance, this small but meaningful action research is able to be done—the research that plays one significant part in my research life.

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I. Introduction

As a person living in the 21st century, using the Internet seems to be a necessary ability. Whether old or young, each individual can access the Internet to interact with others or have many things done via the Net. And using the information acquired from the Internet seems to be one way for students to complete their assignments. As a matter of fact, this is also one significant skill that students will heavily depend on when they do PBL learning. When designing the PBL elective course for my 11th graders and carefully examining their learning prerequisites, the question suddenly flashed into my mind: How do my students, as EFL (English as a foreign language) students, develop their ability to search the English websites when they are required to do so to accomplish their English assignments? If they are not competent in this searching skill, how can they go further to experience PBL learning? Because of this, I decided to design the pre-planning stage of PBL learning—instructing my students to learn how to use the Internet-searching skill. Therefore, the title “I-search” implies several meanings: internet searching and information searching.

II. Theoretical Background

When designing the instruction of the pre-planning stage, Prof. Yeh reminded me that I, as an EFL teacher, have to deal with the Internet-searching topic very carefully, for it would inevitably fall into designing the lesson plan solely on information literacy instead of creating one with EFL elements. Thus, this section is quite important to my designing. The articles mentioned in this section are important because their statements are relevant to the core concept of my lesson plan.

2.1. Information Literacy

More and more educators pay attention to information literacy and find its significance. In *Understanding information literacy: A primer*, Horton cites the definition of information literacy from the Alexandria Proclamation adopted by the High Level Colloquium on Information Literacy and Lifelong Learning in November 2005. Information literacy is a means “to empower people in all walks of life to

seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals” (Horton, p.i). Since it plays a crucial role in the digital age, everyone, in Horton’s mind, has to “learn how to utilize those incredibly diverse and powerful technologies efficiently and effectively to search for, retrieve, organize, analyze, evaluate information and then use it for specific decision-making and problem-solving ends, evaluate information and then use it for specific decision-making and problem-solving ends” (p.i-ii). As a matter of fact, from his statement, the ways to assess the information are exactly related to the abilities that we expect our students to acquire in EFL learning and to employ in the real world. Pahomov’s claim simultaneously echoes Horton’s viewpoint. In her book *Authentic Learning in the Digital Age: Engaging Students through Inquiry*, she directly announces that assessing the credibility of information posted on the web is “a skill crucial to living in the digital world . . . Mastering this skill isn’t just useful for school; it prepares students for a growing, and increasingly complex, aspect of modern life” (p.53). In my action research, I merely focus on how my students search, select, and evaluate information in order to acquire the necessary information on the Internet.

2.2. Information Literacy and EFL Students

When searching for relevant studies on information literacy and EFL learning, I indeed felt anxious for there seems to be few sources to illustrate this aspect. It was not until I read Johnston’s dissertation that I felt excited, and I think EFL teachers have to learn it, especially those who would like to encourage their students to pursue academic research via the Internet.

The first significance of Johnston’s study is that she discovers few researchers concentrate on how EFL students experience their learning of information literacy. Though the EFL participants she interviews in her qualitative research are in the Arabic context, her literature review illustrates that “there is a significant gap in research about EFL/ESL students and information literacy” (p.201), especially in the aspects of academic reading and writing (p.201). The findings from interviewing her participants may provide “significant insights about this particular group of EFL students’ experiences and perceptions of information and learning that can be used to inform curriculum development in a variety of contexts and situations (p.201). Hence, I take reference to her suggestions and use her observations to see whether my students are in a similar situation as they learn how to search the Internet. The following are other great thoughts excerpted from Johnston’s dissertation.

2.2.1. Academic Reading

Johnston points out that “language had a major impact on EFL students of

information literacy” (p.209). She finds that “EFL students tend to take a surface approach to reading, including skimming and scanning abstracts and texts, some of which can be attributed to the difficulty students have in reading the content in English” (p.212). Owing to the language barrier, EFL students interviewed in her study would often choose to “read abstracts or scan information in articles as their reading strategies” or “choose alternative sources if they did not understand the language in them” (p.205). “[T]he perceived difficulty of reading academic information in English and the length of the resources”—both are factors that make her EFL interviewees decide which information to accept or to read (p.210). Therefore, in the aspect of academic reading, Johnston concludes that “[t]he students’ experiences of understanding and organizing information were again based on techniques and strategies related to language” (p.210). Furthermore, from her interview, she finds that translation seems to be one survival skill for those EFL interviewees:

EFL students faced difficulties with word recognition and translated words in order to understand their meaning. EFL students prefer to translate from English to their own language and see many barriers to translating information from their own language to English (p.212).

2.2.2. Using the Theme to Teach Information Literacy to EFL Students

Johnston reminds that “[teachers] cannot teach the processes or act without teaching the object or focus of this process” (p.226). She also cites other researchers’ suggestions (Booth, 1997; Martin & Ramsden, 1987) to support her statement: “[T]eaching students how to learn something from a generic perspective is less effective than teaching content specific curriculum” (p.226). Based on her suggestion, my method in the pre-planning stage is to have my students practice their Internet searching ability by employing the theme—“Teenage Bullying.”

2.3. Inquiry-based Learning

Inquiry-based learning is one of the great ways to connect students’ learning to the real world. However, it is pretty restrictive to merely invite students to ask questions. Pahomov’s words reflect the embarrassing part of my instruction in this research:

[T]o define inquiry as just “asking questions” is too reductive. It’s also the way that teachers can trick themselves into believing that they’re facilitating inquiry in their classrooms. Letting students ask deep questions is nice, but

those questions alone do not transform a curriculum. Real transformation requires a plan (p.18).

In my instructional design, I spent the most time figuring out how to lead the class to develop their research question. In the process of developing the research question, I adjusted the version four times. Therefore, I definitely agree with Pahomov's statement that inquiry-based learning indeed requires deliberate planning.

2.3.1. Constructing Inquiry

Pahomov states that “teachers who want students to collect their own data need to spend time on modeling and practicing the many different ways that students may engage with researching the world” (p.50.) Every lesson plan all comes from what one teacher is familiar with. In the beginning, I just tried to employ the strategies to ask questions I once used in the classrooms in this pre-planning instruction. Yet in the process experimenting with those inquiring strategies, I gradually realized the significance of why library science has its unique methodology to develop their research topics. I also understood that teachers of low and intermediate students have to equip their kids with several important skills before they are really ready to do PBL learning. The following is the record of the inquiring strategies I have employed in the instruction. As for what other things teachers have to notice, they are listed in my teaching reflection.

2.3.1.1. 5W1H—Who, What, Where, When, Why, and How

5W1H (Who, What, Where, When, Why, and How) are the basic question words. So students are told to use these question words to design their research questions. In the stage of generating the research topic, students are required to employ 5W1H to create questions as they see/read the realia presented in the classrooms.

2.3.1.2. The Question-Answer Relationship (QAR)

Using 5W1H to design questions is not enough. Students have to learn that there are levels of questions they might consider when designing their research topics. The question-answer relationship introduces four levels of questions—(1) Right There Questions, (2) Think and Search Question, (3) Author and Me Question, and (4) On My Own Question. According to *QAR Question Types* by the Kentucky Department of Education, the answers to Right There Questions exist in the text so the reader could directly find out from it. Like Right There Questions whose answers could be found directly from the text, Think and Search Questions expect the reader to find the clues from different parts of the text and think how the information or ideas fit

together. As for Author and Me Questions and On My Own Questions, their answers cannot be directly found in the text. The former require readers to think about what they already know and what the author tells them. They are encouraged to use ideas not stated directly in the text. And On My Own Questions require the readers to utilize their personal experiences to answer them; they can answer these questions without even reading the text.

2.3.1.3. Different Realia to Figure out Questions

I provide different realia for my students in order to stimulate them to have abundant thoughts toward the assigned theme “teenage bullying.” In the process of the inquiring stage, I use pictures, scenarios, a song, and several clips. All the resources could be found from the Internet. So it’s not difficult for teachers to prepare these realia.

2.3.1.4. Associating Keywords

The usage of keywords is quite important in reading comprehension. It’s the same in the stage of generating research topics. The strategy of associating keywords here is to be connected with the realia. Students are required to associate keywords when they see/read the realia.

2.3.1.5. Graphic Organizers

McKenzie mentions that “[g]raphical organizers help keep students plan their research forays.” When students do the research, graphic organizers, according to McKenzie, could help guide the gathering, focus purpose, and show what is gained and tell what is missing. In my instruction, three graphic organizers are provided—the KWL chart, the theme-word catcher, and the spider web—in the pre-planning stage. All these tools are to help students generate their preferred research topic.

2.3.1.6. Research Methodology Developed by Libraries

The libraries themselves have their own research methodology to develop the research topic. After seeing many papers and clips about how to form the research topic, I decided to choose the clip done by Laurier Library as my main reference in guiding my students to figure out their own research topics.

According to the clip “Developing a Research Question”, the researcher has to experience five stages so as to form their preferable research topic. These stages are (1) to pick a topic, (2) to narrow a topic, (3) to list some questions, (4) to pick one question, and (5) to focus the question again. In its second stage, the clip suggests to

make use of the spider web to assist the researcher to narrow the topic. Besides, after the researcher does the second time to pick the renewed question and begin to re-focus the question, the clip recommends the researcher to use 5W1H to form one appropriate research topic. There is one thing worth mentioning here: the clip reminds the researchers of the good features that a good question should have. That is, it deals with one issue only; it requires analysis and demands people to think the aspects of 'how' and 'why'; it uses specific and focuses terms; it is stated clearly and there are no vague words appearing in its statement.

2.4. Plagiarism

Both Pahomov and Johnston point out that as teachers guide the class to do the research, plagiarism is the first and the foremost topic they have to cover, and they must inform them not to violate this bottom line. Johnston cites the discovery by Martin, Reaume, Reeves & Write (2012) that “ESL students often plagiarize due to a lack of knowledge of intellectual property rules in an academic environment” (p.210). If EFL students have language barriers when do the research, then they, based on Pahomov, must “be thoroughly educated on plagiarism” (p.56). Therefore, reminding the class of this is also my first job when I invite my students to do the pre-planning stage.

2.5. Using Keywords to Search the Internet

Nowadays, there are many useful search engines in the world. In order to have my students familiarize with the skill to search on the Internet, I just ask them to use Google and Google Scholar to search for information. Even with such convenient search engines, my students still need to learn the strategies to do search the Internet. Using keywords is certainly a crucial skill they ought to learn.

2.5.1. Johnston's Point of View

In Johnston's dissertation, she cites the discovery by Hughes (2009, 2013) that “international students did little pre-planning of their online search strategies or considered selection of keywords and synonyms when searching for information” (p.208). These occur because of their “linguistic difficulties such as spelling errors, limited vocabulary, comprehension and inability to quickly scan results lists and retrieve documents” (p.208). From Johnston, we know that, apart from synonyms, we have to teach our students more ways to associate keywords in searching the Internet.

2.5.2. Herington's Point of View

Herington suggests several ways from the English linguistic aspect for the searchers to use. The suggestions he offers include (1) word order (i.e., “management and finance courses” vs. “finance and management courses”), (2) word families—here he means the derivation of the word (i.e., “political + corrupt” vs. “political corruption”), (3) collocation (i.e., “‘development and research’ + ‘cars’” vs. “‘research and development’ + ‘cars’”). These methods can also help the searchers find the relevant information.

2.6. Scaffolding

In inquiry-based learning, teachers' scaffolding is extremely important. Pahomov directly acclaims its significance: “[Students] may develop their own line of inquiry, but they will need [teachers'] feedback in refining their questions” (p.15). For both my students and me, it is our first time to do inquiry-based learning. My students need my assistance (and I need the experts' assistance). As I demonstrate how to associate keywords, and select and evaluate information in the process of searching the Internet, I create PPTs with concrete examples for the class to comprehend how to process. To me, modeling is one kind of scaffolding.

From the experimental part of generating the research question, I do experience my students' direct reaction to my adjustments on the guidance. Thus, I can't agree with Cheng and Dörnyei more when they mention “the way the teacher presents the learning tasks bears a strong effect on how the students perceive the assigned activity” (p.162). In their article, the citation from Williams and Burden (1997) particularly impresses me: “teachers should be clear in their minds why specific tasks have been selected and careful to convey exactly what is required of the learners” (p.162).

2.7. Storing Material

The reason why I list this item is not because it is one important theory. However, it is useful advice I learned from the PBL online program held by the University of Oregon. I was required to learn to use the Google Site as the platform to store all the PBL materials I developed within the program. Later I learned that the platform, in one way, serves the function to store all my materials, for one PBL lesson plan indeed requires many documents. On the other hand, after I finished the program, the platform Google Site became my e-Portfolio collecting and recording all my learning process. In the book *Project Work*, the author Fried-Booth mentions that “[teachers] need to ensure that [they] can at least initially provide the means and the space to store everything students collect” (p.14). And I 100% agree with this thought. So in the pre-planning stage, my students are instructed to store all the

materials they have via the Google platform.

III. Class Description

The instruction of the pre-planning stage is conducted in the elective course “Global English.” The elective course is held for two hours per week; it is conducted for one academic year. The objective of this elective course is to cultivate students’ world view and develop their critical thinking ability. The approach to conduct this course is in the form of PBL learning. In other word, they are going to attempt three PBL projects concerning civic engagement, entrepreneurship, and woman empowerment. However, judging from students’ prerequisites, I think these students need to have the training on web searching as a pre-planning stage before they formally do PBL learning because the three PBL projects require the learners to employ the ability of Internet searching in academic learning. In this way, they may utilize this ability to apply to the subsequent PBL projects. And this action research is about the pre-planning stage.

There are ten 11th graders—4 girls and 6 boys—attending this elective course. Their English proficiency belongs to the levels between low and intermediate. 9 of them are from social science classes (3 girls and 6 boys) and 1 comes from Applied English class. These students are composed of three countries: 8 from Taiwan, 1 from Japan, 1 from Korea; the two students from other countries are overseas Chinese female students. In terms of their English proficiency, only 2 local female students are excellent in English. The 6 local male students perform ordinarily in English learning. As for the two overseas Chinese female students, they work poorly in English. The student from Japan has a strong desire to learn English better while the student from Korea seems to have little motivation to learn English.

IV. Facilities

Through the whole academic year, the elective course is conducted in the computer lab. Each student can have his computer to do the project. The lab has one projector, but it doesn't work. Fortunately, students can have access to the Internet.

V. Teaching Procedure

The instruction here is still based on theme-based learning, and this case is concerned about teenage bullying, a topic that my students are familiar with. The

teaching procedure is made up of phases: (1) learning the class orientation, (2) developing the topic, (3) associating keywords, (4) selecting and evaluating the information on the websites, (5) evaluating the information, and (6) wrapping-up. The last phase of wrapping up is just to assess whether my students have learned the skill of searching the internet. Because this case is experimental, the procedure records the implementation and the constant adjustment, especially the stage of developing the topic. The following is the detailed instructional procedure.

5.1. Learning the class orientation

5.1.1 Introduce the class rules.

- A. Active participation is required.
- B. Complete (a) weekly online feedback, (b) at least 2 comments on other colleagues' feedback per week, and (c) the weekly questionnaire.
- C. Complete all the assignments before deadlines.

5.1.1.1. Introduce the rules for the weekly feedback.

Students are required to write down their own reflection and post them to their own Google Site every week. They have to post their feedback in advance so that their colleagues are able to have sufficient time to give them their comments.

5.1.1.2. Introduce the rules for weekly comments.

In addition to their weekly reflections, each week they will be required to make at least 2 posting/comments (more are better) to different colleague's Google Sites.

5.1.1.3. Introduce the rules for the online questionnaire.

Students are required to submit the online questionnaires in the end of each class. They are reminded to check the due date of each online questionnaire.

5.1.2. Inform the network etiquette.

The following is the network etiquette that students have to obey:

- A. Be respectful to each other—This is not the place to disrespect other people.
- B. Please cite your sources—Don't plagiarize. You can quote other people and if you get information from another website, please make a link!
- C. Asking permission—If you use photos, quotes, or mention something personal, then please make sure you have the permission of the person or organization in order to respect privacy and copy right laws.
- D. Comments should be related to the post and be more or less on-topic.

5.1.3. Have students set up their Gmail addresses and their personal Google Sites.

5.2. Developing the topic (1)—Pictures with QAR and 5W1H

5.2.1. Introduce the question-answer relationship (QAR)

Students learn the four types of QAR—‘Right There’, ‘Think and Search’, ‘Author and Me’, and ‘On My Own.’

5.2.2. Have students practice questioning with QAR combined with 5W1H

Students work in groups. The teacher offers pictures (see 10.1.1. Picture A and 10.1.2. Picture B) concerning teenage bullying for students to do QAR practice. They are reminded to use 5W1H (who, what, where, when, why, how) to complete their questions.

5.3. Developing the topic (2)—Pictures/Scenario with Keywords and 5W1H

5.3.1. Have students work in groups.

5.3.2. Offer pictures (see 10.1.1. Picture A and 10.1.2. Picture B) and the scenario (see 10.1.3. Scenario) concerning teenage bullying to students.

5.3.3. Ask students to figure out 5 keywords when they see the pictures or read the scenario.

5.3.4. Have students use the 5 keywords they came up with to create questions.

5.4. Developing the topic (3)—Create Questions via Songs

This part is derived from the inspiration learned from Pearl Chang, who conducted the professional learning community on differentiated learning in our school in 2013. She introduced the song “Don’t Laugh at Me”, a song related to school bullying, and she also guided us in different ways—seeing, hearing, and thinking to grasp the gist of the song. I used this part in the pre-planning stage, trying to assist my students to generate their research topic.

5.4.1. Have students work in groups.

5.4.2. Offer the song “Don’t Laugh at Me” (see 10.1.4. the Song “Don’t Laugh at Me”).

5.4.3. Ask students to use 5W1H to figure out questions from seeing, listening, and thinking. The questions have to be related to teenage bullying.

5.5. Developing the topic (4)—Figure out the Question with the KWL Chart, the Theme-Word Catcher, and the spider web

5.5.1. Ask students to work in home teams:

- 5.5.1.1. Offer the main topic.
- 5.5.1.2. Provide the KWL chart for students (see 10.2.1. The KWL Chart).
- 5.5.1.3. Have students write down what they know about teenage bullying in the K column in the KWL chart.
- 5.5.1.4. Ask students to share their background knowledge with their partners.

5.5.2. Have students work in expert teams:

- 5.5.2.1. Offer the clips concerning teenage bullying (see 10.1.5. The Clip “Words Hurt—Bullying Commercial” and 10.1.6. The Clip “The Clip “Anti-Bullying Learning and Teaching Resource (ALTER) Catholic Education Office, Wollongong”) and the theme-word catcher (see 10.2.2. The Theme-Words Catcher).
- 5.5.2.2. Ask students to write down the words related to bullying they see/hear from the clips.
- 5.5.2.3. Have students discuss with their partners and classify the words they collected from the clips.
- 5.5.2.4. Ask students to decide which way they categorize the words either from part of speech or from 5W1H.
- 5.5.2.5. Have students categorize those words in the theme-word catcher.
- 5.5.2.6. Invite students to state the reasons how and why they categorized the words.

5.5.3. Have students go back to home teams:

- 5.5.3.1. Ask each individual student to write down the question he/she is interested in the W column in the KWL chart.
- 5.5.3.2. Invite students to share their interest questions with their team members.
- 5.5.3.3. Have each team decide the topic that they're going to explore through the Internet.

5.5.4. Have students narrow the topic.

- 5.5.4.1. Have each team draw the spider web (see 10.2.3. The Spider Web) to narrow down the topic they're interested in.
- 5.5.4.2. Invite each team to decide which sub-topic they're going to explore further.
- 5.5.4.3. Ask each team to form/adjust the question based on the sub-topic they have decided upon.

5.6. Associating the keywords

- 5.6.1. Illustrate how to associate the keywords and enter them on Google.
 - 5.6.1.1. Ask each team to list their research topic with the handout (see 10.2.4. Associating the Keywords in the Stage of Internet Searching).
 - 5.6.1.2. Have individual teams locate the keyword from their topics.
 - 5.6.1.3. Have them associate the theme words.

5.6.1.4. Invite them to enter the words into Google.

5.7. Selecting and Evaluating the Information via Google

5.7.1. Illustrate how to select the information via Google

5.7.1.2 Introduce the search engines ‘Google’ and ‘Google Scholar.’

5.7.1.3. Demonstrate the clues that students may take from a reference:

- A. Keywords shown in red.
- B. The numbers of entries listed.
- C. Time information presented.
- D. Types of files (i.e., .pdf, .ppt, or .doc).
- E. Academic information—the times to be cited.
- F. Common domain (i.e., .com, .gov., .edu, or .org.).
- G. Web country codes on the Internet (i.e., .tw, .uk, .jp, or .cn).

5.7.2. Illustrate how to evaluate the information via Google

- A. Predict from web page prediction.
- B. 5W to help evaluate information based on Schroc (2009) from “資訊素養與倫理”:
 - (a) **WHO** wrote it?
 - (b) **WHAT** is the website all about?
 - (c) **WHEN** was it made?
 - (d) **WHERE** did it come from?
 - (e) **WHY** should you use this page?

5.7.3. Have students work in teams to select and evaluate the information via Google with the handout (see 10.2.5. Selecting and Evaluating Information).

5.8. Project Assessment—Stage 1 “Forming the Research Topic”

5.8.1. Ask students to work in groups.

5.8.2. Have them read the topic assigned carefully: “**Compare teenage cyber bullying in Taiwan and the USA**”

5.8.3. Have each group formulate the research question by

- A. Searching Google/Google Scholar,
- B. Using all the handouts provided:
 - (a) The KWL chart (see 10.2.1. KWL Chart), and
 - (b) The Spider Web (see 10.2.6. The Spider Web for the Project assessment).
- C. Using all the techniques they have learned in the process with the handouts provided:
 - (a) The handout “Associating the Keywords” (see 10.2.7. Associating the Keywords to Generate the Research Topic),

- (b) The handout “Selecting and Evaluating Information” (see 10.2.8. Selecting and Evaluating Information to Generate the Research Topic).

5.9. Project Assessment—Stage 2 “Using the Research Topic to Do the Internet Research”

- 5.9.1. Ask each team to list their research topic and circle the keywords from the research topic they have developed.
- 5.9.2. Invite each team to use **the spider web chart** to associate the **KEYWORDS**. They may fine-tune their research topic if necessary (see 10.2.9. Associating Keywords from the Research Topic).
- 5.9.3. Have each team record **each keyword** on their handouts when they search via Google or Google Scholar (see 10.2.10. Recording the keywords in the Project Assessment).
- 5.9.4. Ask each team to record **6 entries (3 for ENGLISH and 3 for Chinese)** in the process of their searching Google/Google, and paste them on the handout (see 10.2.11. Selecting and Evaluating Information in the Project Assessment).
The 6 entries must contain:
- A. News (1 for English and 1 for Chinese)
 - B. Information from the government (1 for English and 1 for Chinese)
 - C. Statistics (1 for English and 1 for Chinese)
- 5.9.5. Invite students to explain why they chose those entries as the appropriate/inappropriate information.

VI. My Students’ Feedback

In the process of instructing my students on how to develop the research topic and how to do the Internet search, I require them to do online feedback and an online questionnaire. In this way, I could compare their work and their learning and then I was able to adjust my teaching in advance of the next week. Owing to the fact that web research in academic learning was quite unfamiliar to them, I would pay more attention to examining their feedback. In this section, I juxtapose the final result of the questionnaires and some of my students’ online feedback, attempting to depict the whole picture of their attitudes toward web research—the must-have skill in the 21st century. I will mainly focus on the inquiring strategies before generating the research topic. In addition, I will look at their keyword association, and information selection and evaluation after their generating the research topic as well.

6.1. QAR

6.1.1. The Question Statement—“This is my first time to learn QAR.”

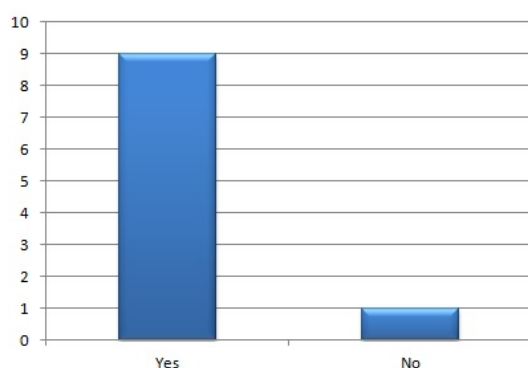


Chart 6.1.1. QAR

Only one student claims that she has never learned this strategy. The rest of other students have already learned this questioning strategy.

6.1.2. Students’ Feedback on Employing QAR to Ask Questions

Charlene: (1) I learn how to express my thought. (2) 學會精準的詢問問題
Shine: (1) 分析問題的種類 (2) 如何從一張圖片中問出有意義的問題
Allen: (1) 我學到了找出重點並用關鍵字迅速找出資料 (2) 我學會了如何問更精準的問題

Students’ feedback suggests they know how to ask questions focusing on the main message they would like to explore.

6.1.3. My Annotation

From the students’ replies, it seems that not many of my colleagues have introduced QAR in their classrooms. Even though most of these students have already acquired this strategy, their replies convinced me of the necessity of instructing this inquiring skill.

6.2. 5W1H

6.2.1. The Question Statement—“In Task 2-1, when we generate key words, which question word is the most difficult for us to collect key words for?”

*Note: Task 2-1 requires that students associate words related to the chosen picture by using 5W1H.

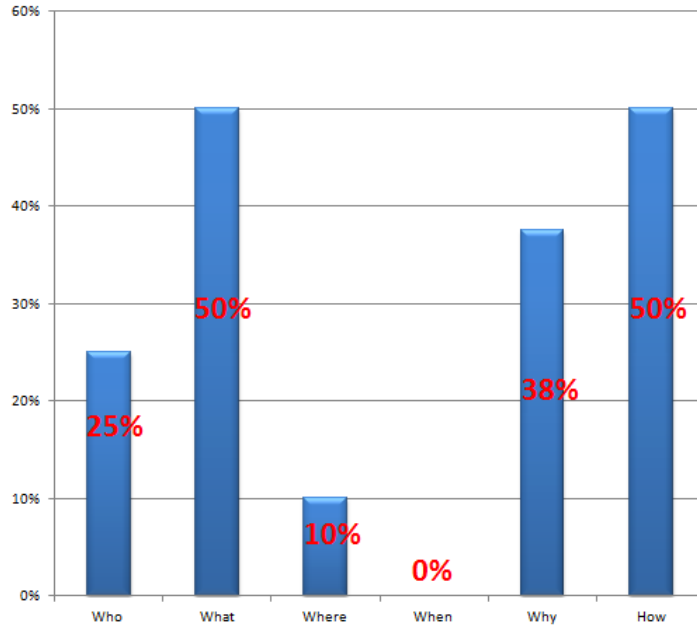


Chart 6.2.1. 5W1H used in Task 2-1

From Chart 6.2.1., half of the students state that it's difficult for them to use both the question words 'what' and 'how' to associate keywords when they see the assigned pictures.

6.2.2. The Question Statement—“In Task 2-2, when we generate key words, which question word is the most difficult for us to collect key words?”

*Note: Task 2-2 requires students to associate words related to the scenario problem by using 5W1H.

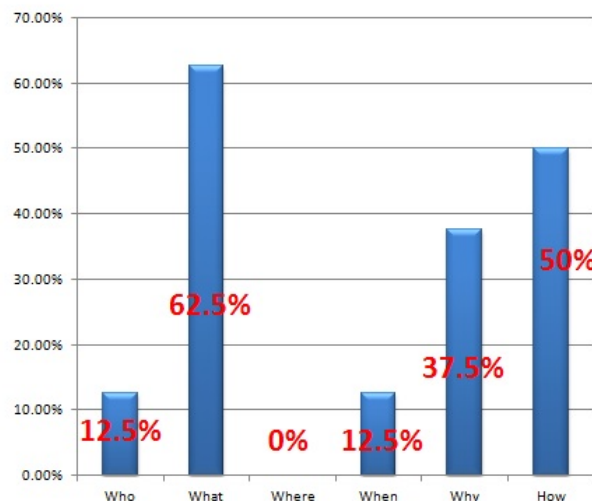


Chart 6.2.2. 5W1H used in Task 2-2

From the statistics, the question words 'what' and 'how' are felt to be difficult by over half of the students when they are asked to use to create questions based on the

scenario problem provided.

6.2.3. The Question Statement—“When we collect keywords with the 5W1H chart, which question word is the most difficult for us?”

*Note: This task requires students to figure out the question after they hear the assigned song.

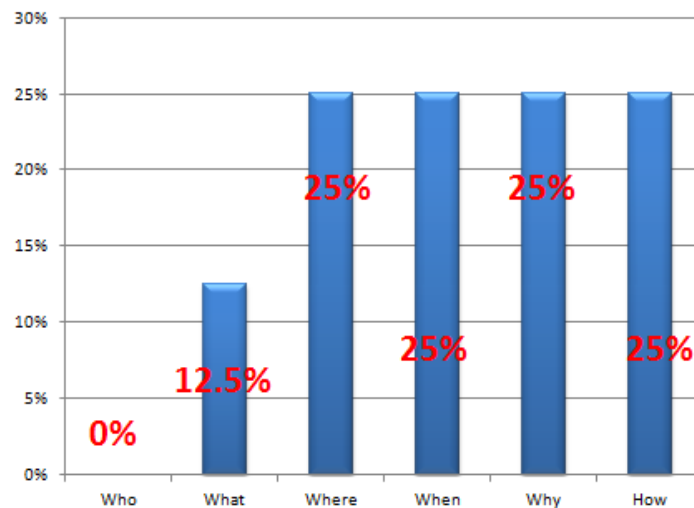


Chart 6.2.3. 5W1H used after hearing the song

According to the chart above, less than 25% of the students feel that the question words are difficult to use.

6.2.4. My Annotation

Even though students are familiar with 5W1H, they cannot utilize all the question words smoothly. When they are asked to read the picture/the scenario problem, half of them feel the question words ‘what’ and ‘how’ are difficult. Yet when they are confronted with the song and are asked to raise questions with 5W1H, using the question words doesn’t seem as difficult. This situation will be discussed in the 6.3 item concerning the different realia provided. From the feedback, one of my students, Charlene, even points out that the practice helped her do the reading comprehension test, while another student Jimmy mentions that this practice helped him understand the theme of teenage bullying more. So I think if our students are trained to be able to ask good questions, then their comprehension toward each learning opportunity or even facing real-life problems will be more comprehensive and in-depth.

6.3. Different Realia Provided to Train How to Collect Keywords and How to Ask Questions

6.3.1. The Question Statement—“Among all the realia Teacher Cynthia offers, which is the most helpful for me to learn how to collect keywords the most? Pictures, the scenario problem, or the clips (including the song)?”

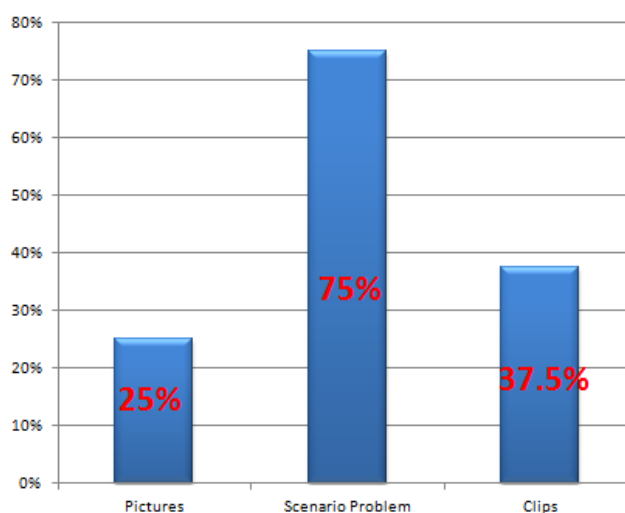


Chart 6.3.1. The effectiveness of Realia provided to help collect keywords

Based on the statistics, 25% of the students believe the pictures offered assisted them to collect keywords. 3/4 of the students think that the scenario problem helped them collect the keywords, while 37.5% of them reply that clips were the ones helping them collect keywords.

6.3.2. (1) Students’ Feedback on Employing 5W1H to Ask Questions with the Assistance of Pictures and the Scenario Problem

Angela: 我學到問問題的題目要怎麼做
Charlene: The lesson is really useful. When I'm having a test like reading comprehension, it can help answer it.
Willson: (1)找重點 (2)問有深度的問題

(2) Students’ Feedback on Employing 5W1H to Ask Questions with the Assistance of the Song

Jimmy: 從課程裡學到了很多東西，像是如何問問題，分組討論激出研究問題等。更讓我了解校園霸凌的議題！
Willson: 謝謝老師讓我更了解問一個好的問題需要的技巧

(3) Students’ Feedback on Employing 5W1H to Ask Questions with the Assistance of the clips provided

Mark: Asking questions is still hard to me.

Wilson: This week I learn how to ask questions. It is not easy at all.

From the three times I collected students’ feedback on asking questions with 5W1H, they seemed aware of what good questions are and had learned how to raise good-quality questions. Nevertheless, it is not an easy job for them to utilize this strategy well if they are asked to apply it to different situations.

6.3.3. My Annotation

From my students’ feedback, the scenario problem is a better way to assist them. Perhaps it is because the scenario problem offered this time was written as a short passage, it enabled my students to acquire necessary words as keywords and then they could use them to create questions. The other two realia—pictures and clips—seemed to challenge my students whose English proficiency was merely low or intermediate. Pictures required their imagination and an abundant word bank, while the clips challenged my students’ English listening comprehension. This convinces me of the importance of utilizing different realia to train students to ask questions because they can be thus trained comprehensively. Yet my students’ performance also reminds me that for those whose English proficiency is not that good, their limited vocabulary and language barriers might restrict them when doing Internet research, which exactly echoes Johnson’s viewpoint on how EFL students experience their learning of information literacy.

6.4. Graphic Organizers

6.4.1. The Question Statement—“The KWL chart is helpful for me to find out the questions I feel are interesting concerning teenage bullying.”

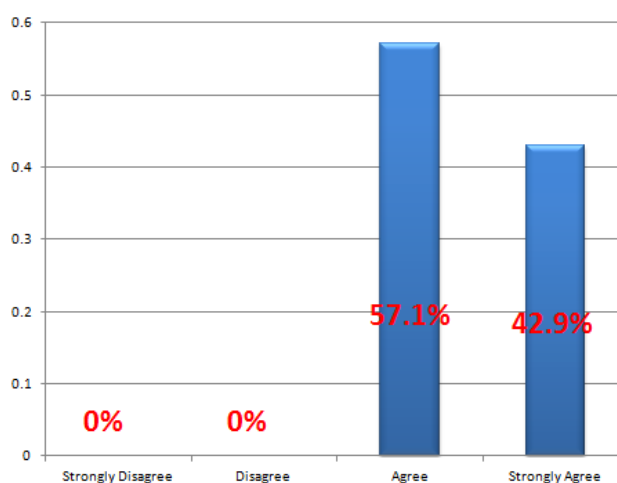


Chart 6.4.1. The effectiveness of the KWL chart to raise questions
All the students agree that the KWL chart is useful for them to create questions.

6.4.2 The Question Statement—“‘Theme-Words Catcher’ assists me to find out the questions I feel are interesting concerning teenage bullying.”

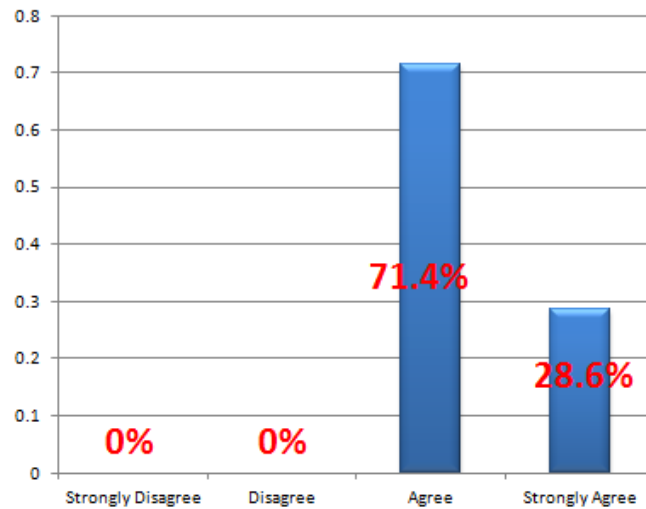


Chart 6.4.2. The effectiveness of the theme-word catcher to raise questions
Again, all the class hold a positive attitude toward the theme-word catcher offered to assist them to raise questions.

6.4.3 The Question Statement—“The spider web is helpful for me to narrow the topic I feel is interesting concerning teenage bullying.”

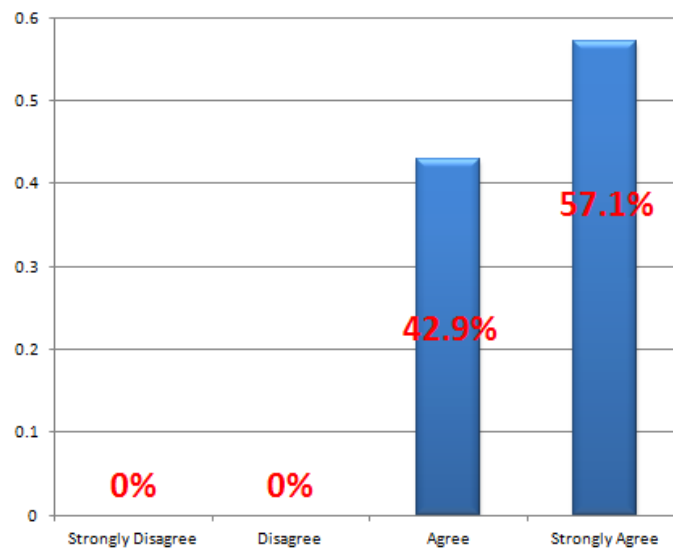


Chart 6.4.3. The effectiveness of the spider web to raise questions
Although each individual agrees with the benefit of the spider web in terms of assisting them to ask questions, the result, compared with that of using the KWL chart and the theme-word catcher, shows the effectiveness of the spider web in generating the questions.

6.4.4. Students' Feedback on Using Graphic Organizers to Generate Questions

Michael: 討論不同的議題，找出最容易也最明顯的議題。
Shine: 就同學提出的問題討論過後，再想出更深層的問題
Angela: 我會學到我跟別人的想法不一樣，但是要討論之後，我們的意見會一致，我覺得很好。

6.4.5. My Annotation

Graphic organizers are an effective tool to collect our thoughts. All my students positively think they can assist them to generate questions. Most important of all, the tools helped them discuss, negotiate, and decide the final research topic. Of the three graphic organizers, I observe the spider web is the most effective tool for my students as they practice narrowing down their final research topic. No wonder the research methodology developed in the field of library science recommends the spider web as one of the tools to figure out research topics.

6.5. Associating Keywords in the Stage of Searching the Internet

6.5.1. The Question Statement—"The handout used today is helpful for me to associate the keywords."

*Note: The handout here refers to '10.2.4. Associating the Keywords in the Stage of Internet Searching.'

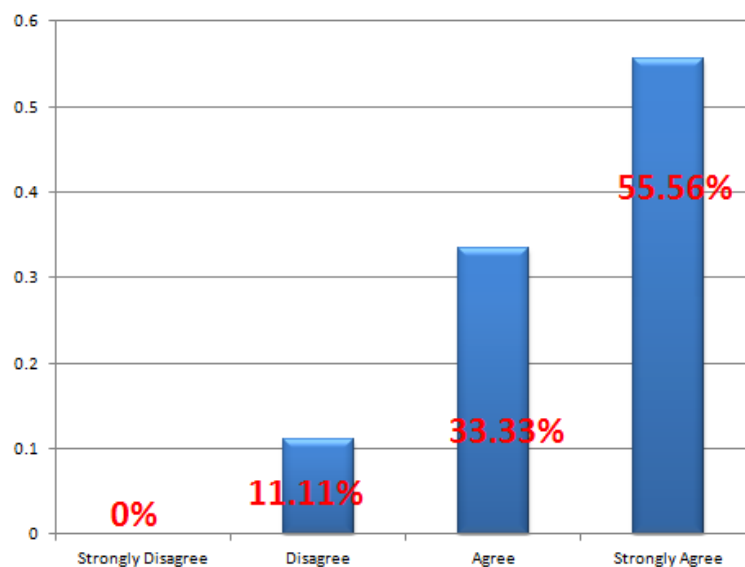


Chart 6.5.1. The effectiveness of the handout 10.2.4 in associating keywords

Only 11.11% of the students disagree that the handout '10.2.4. Associating the Keywords in the Stage of Internet Searching' helps them figure out the keywords. Up to 90% of the students reply this handout is useful for them.

6.5.2. The Question Statement—“The handout used today is helpful for me to use the keywords to search Google.”

*Note: The handout here refers to ‘10.2.4. Associating the Keywords in the Stage of Internet Searching.’

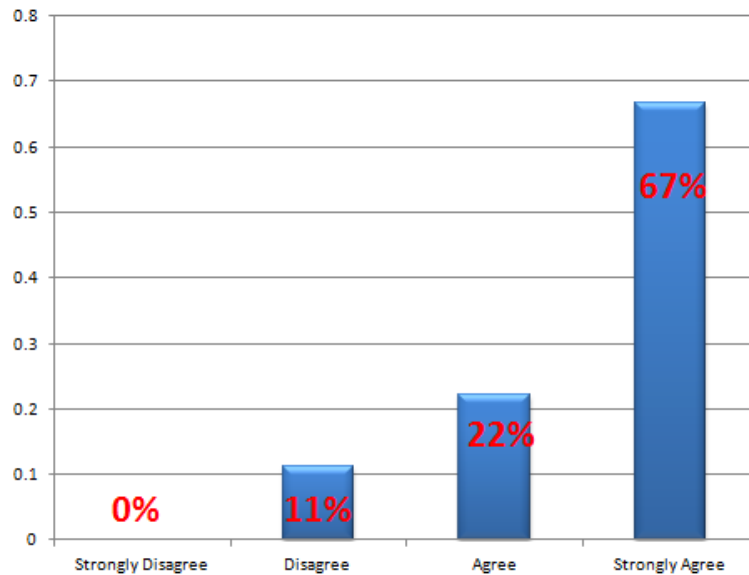


Chart 6.5.2. The effectiveness of the handout 10.2.4 to search via Google

More than 89% of the students positively believe that the handout ‘10.2.4. Associating the Keywords in the Stage of Internet Searching’ is useful for them when they search on Google.

6.5.3. The Question Statement—“Pair discussion helps me associate the keywords.”

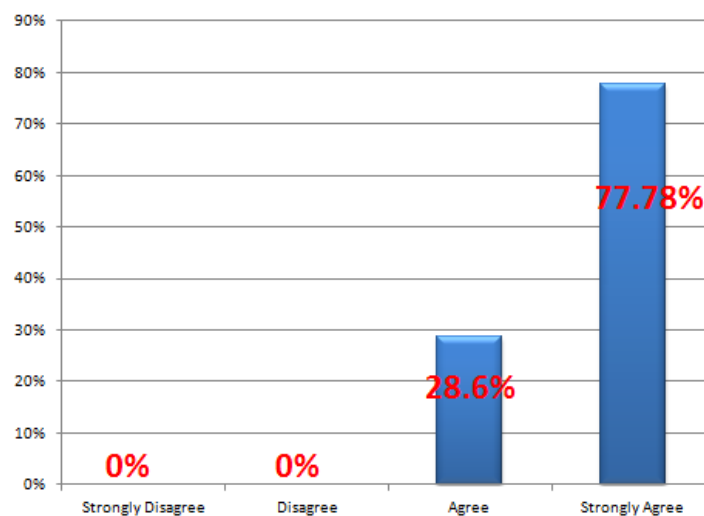


Chart 6.5.3. The effectiveness of pair discussion to associate keywords

The statistics show that all my students agree on the helpfulness of pair discussion as they do the Internet searching.

6.5.3. The Question Statement—“Pair discussion helps me search on Google.”

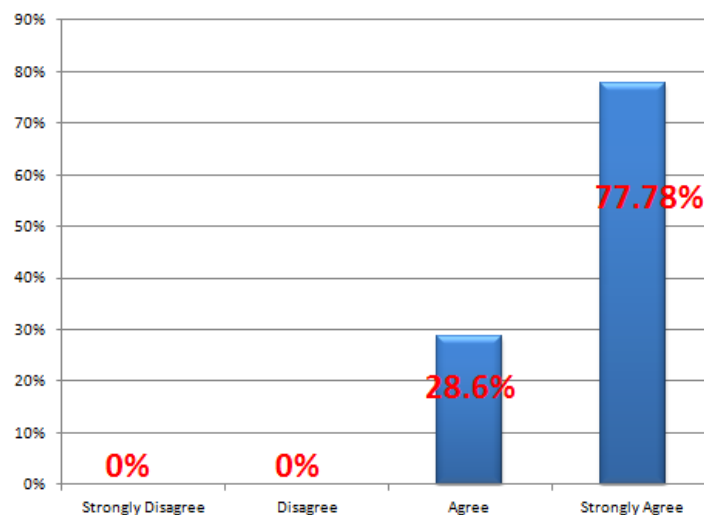


Chart 6.5.3. The effectiveness of pair discussion to search via Google

This statistic is the same as Chart 6.5.1. Pair discussion plays a vital role in assisting my students to search on Google.

6.5.4. (1) Students’ Feedback on Using Handout 10.2.4. to Associate Keywords

Jimmy: 從一開始決定題目，到 keyword 順序比較，發現了許多其中的差異

Meia: Thank you for this week’s class. I expect to learned more deep about research and analyzing skills in the next class:)

(2) Students’ Feedback on Pair Discussion to Associate Keywords

Michael: (1) 多個人想，答案越快出來

(2) 這次的活動一開始完全無所適從，當抓到方向時就做得很快

Joe: 如何利用別人的想法

From my students’ feedback, I observe they start learning to think when they do the tasks. They can discover the different results of utilizing word order. In addition, with the assistance of pair discussion, they can become more aware of paying attention to their colleagues’ thinking.

6.5.5. My Annotation

It’s exciting to see the results here. That means my design of Handout 10.2.4. and placing pair discussion here are successful as the class associate keywords so as to search via Google.

6.6. Selecting and Evaluating Information in the Stage of Searching the Internet

6.6.1. The Question Statement—“Learning information literacy helps me find information when I search the Internet.”

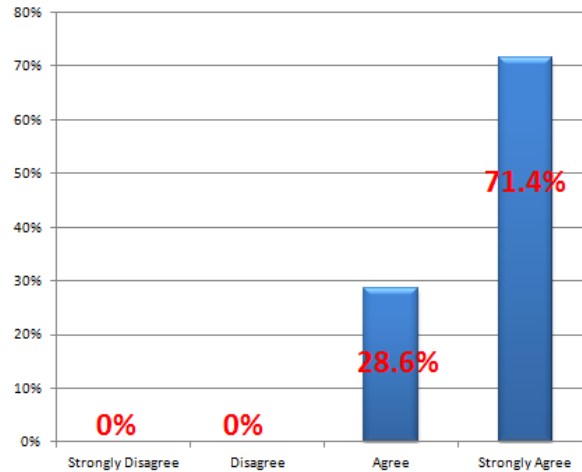


Chart 6.6.1. The effectiveness of learning information literacy to search information

All my students agree that learning information literacy helps them find information.

6.6.2. The Question Statement—“Learning information literacy helps me evaluate information when I search the Internet.”

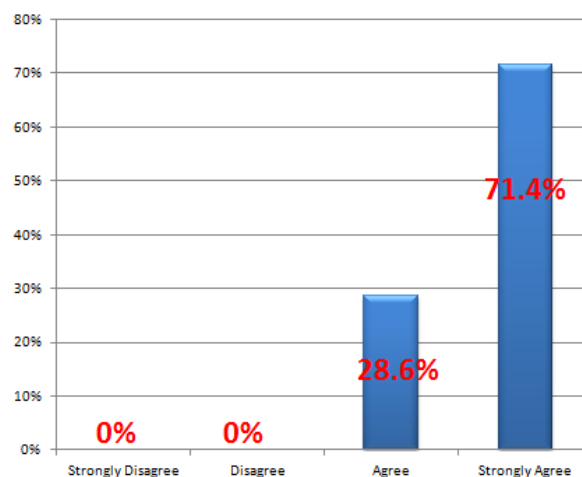


Chart 6.6.2. The effectiveness of learning information literacy to evaluate information

The result shows that each individual in my class agrees on the importance of

learning information literacy as they evaluate information on the Internet

6.6.3. The Question Statement—“Learning information literacy helps me read English information when I search the Internet.”

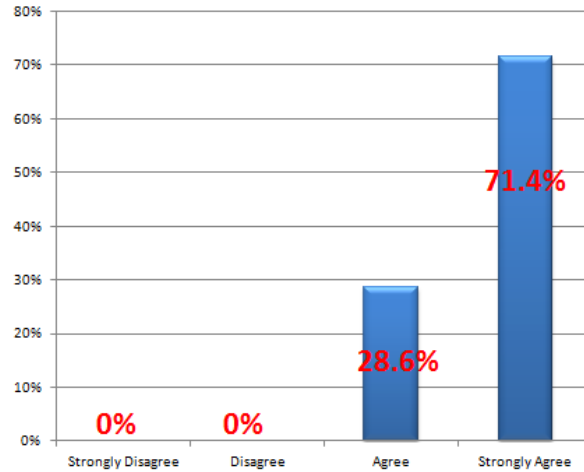


Chart 6.6.3. The effectiveness of learning information literacy to assist them to read English information

Again, the statistics show that the whole class hold a positive attitude toward information literacy helping them read English information when searching the Internet.

6.6.4. The Question Statement—“The handout used today is helpful for me to search for information through Google.”

*Note: The handout here refers to Handout ‘10.2.5. Selecting and Evaluating Information.’

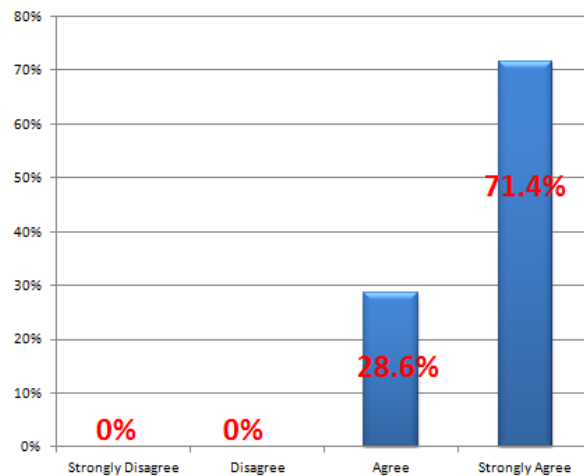


Chart 6.6.4. The effectiveness of Handout 10.2.5. to assist students to search information

Handout 10.2.5, according to Chart 6.6.4., seems to be successful in terms of assisting my students to search information.

6.6.5. The Question Statement—“The handout used today is helpful for me to evaluate information through Google”

*Note: The handout here refers to Handout ‘10.2.5. Selecting and Evaluating Information.’

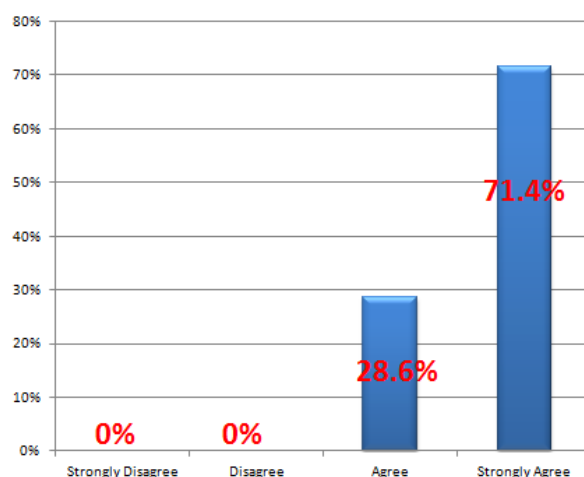


Chart 6.6.5. The effectiveness of Handout 10.2.5. to assist students to search information

Based on the result, Handout 10.2.5 also performs well in the aspect of assisting my students to search information.

6.6.6. My Annotation

Based on the results above, I have learned that those who would like to learn the Internet research ability have to learn the skills required in information literacy, the skills that include generating the research topics, associating keywords, selecting and evaluating information. What’s more, students need teachers’ scaffolding. With well-designed handouts, students are able to use them as the tools to develop the Internet searching ability.

6.7. Project Assessment

6.7.1. Students’ Feedback on Their Overall Learning in Stage (1) “Forming the Research Topic”

Charlene: 以前尋找資料總是無法找到精確的事情，現在學會從大範圍逐漸縮小，找到更加精確的資料，也方便我做出扣緊主題的報告
Allen: 我學到了學術搜尋的運用及刪減不必要的關鍵字
Mark: 在下關鍵字的地方比以前好很多，也懂得用 Google Scholar 搜尋精

細的學術論文
Michael: 搜尋關鍵字時,找不到想要的資訊機率降低了,正確率升高
Joe: 更快速的網路搜尋技能
Jimmy: (1) 打自己組找到的關鍵字 (2) 尋找有相關內容的敘述 (3) .從網頁裡找到有需要的資料,用 5W1H 說明
Willson: 對我來說有點小困難,有些題目真的要想破頭才能擠出一點點東西,我會加油!
Meia: I think some parts in this project is hard for me.
Angela: 換關鍵字的順序。搜尋的結果不一樣!

From my students' feedback, I observe their ways of generating the research topics have been somewhat improved. They can reflect on what they have gained from learning about generating the research topics.

6.7.2. Students' Feedback on Their Overall Learning in Stage (2) "Using the Research Topic to Do the Internet Searching"

Charlene: 大家共同提出意見以及對於這個問題的疑問,讓我們可以更有效率的找到需要的資料"
Allen: 這次速度又更快了,有了上次的經驗,這次就比較上手.
Michael: 能夠分工,且很有系統性完成任務
Shine: 我覺得我們的團隊合作很好,意見都差不多不會起爭執,所以我們很有效率
Willson: 很不錯,大家都十分配合,體驗到團結力量大
Mark: 我跟 Meia 找比較多的資料。Angela 負責記錄,她後來有幫忙找資料,找得很快呢!

Team work seems to be the main key concept in my students' feedback. Their words also show that the ability to search the Internet can be improved through repeated practice.

6.7.3. My Annotation

The descriptive words by my students suggest that it takes time to develop the Internet searching ability. As long as they practice this skill many times, they can become acquainted with it. Furthermore, the instruction in the pre-planning stage requires teachers' scaffolding (i.e., the demonstration of how to employ those skills and the designs of handouts) and students' collaborative learning.

VII. My Teaching Reflection

The word 'grueling' describes the feeling when I research and develop the instruction of the pre-planning stage because there are so many technological terms and thoughts I have to deal with and most of them are quite unfamiliar to me. I seem to apply all the questioning strategies I know to the instruction. And I have to say thanks to my 10 students because they tolerated my constant adjustments to the teaching procedure. Fortunately, despite the chaotic journey, there were still some signs presented to me that I could reflect on to select the best and the most precious ingredients for my next instruction. The following is my reflection on implementing the instruction of this pre-planning stage. I hope these words will benefit those who would like to develop the more efficient teaching in teaching EFL students the web research skills.

7.1. Web research is a must-learn skill for EFL students who do academic learning.

Nowadays, more and more learning is related to the Internet. Before I developed the design of the instruction in the pre-planning stage, I assumed my students were quite good at using the Internet to search the relevant information; therefore, it would be easy for them to use the Internet to do their academic assignments. As a matter of fact, I found I was totally wrong after I investigated their habits of using the Internet before their formal learning in class. Most of my students just spend time playing online games, chatting, blogging, or doing online shopping. If they really have an opportunity to use the Internet to do an assignment, the only thing they know how to do is to copy and paste. Therefore, if we teachers really want them to use the web to do assignments, we have to teach them how to search it. In addition, since our students are in an EFL environment, as we design the English-related curriculum incorporated with the Internet searching, we have to deliberately consider various aspects our EFL students might encounter and figure out how to guide these students systematically.

The good news is that the web research skill, based on my students' reflection, is an empirical learning, instead of theoretical learning. As long as students constantly practice it, this ability will become better and better and their research ability will be more effective. Simultaneously, this research attempts to remind EFL teachers not to neglect teaching students this important entry skill.

7.2. Students learning to search the web require teachers' scaffolding.

If teachers would like to design the curriculum to focus on web searching skills,

they have to keep in mind to always provide scaffolding! For instance, as I demonstrate how to associate keywords when I plan to search the Internet, I just create a PPT file to show concrete examples to students. Students immediately realize what they could do after learning my instruction. Since the objective of this pre-planning stage is to see whether my students are skilled at searching the Internet, having the skill wrapped into the theme-based learning is one effective way for students to learn. So I designed the theme of this instruction around teenage bullying. After this instruction, my students told me that they not only learned how to search on the Internet, they also learned words/phrases/concepts related to teenage bullying. From the skill to the content, teachers have to carefully and proactively consider whether each instructional step leads the individual learner to do the learning.

7.3. Whether EFL students are able to do PBL learning depends on their English proficiency.

This statement is mainly for our local teachers who would like their EFL students to do some English PBL learning. Johnston's dissertation discovers that EFL students, as they search and collect the relevant information, will be restricted by their English language barriers. Using the online translators is even one strategy she finds among her interviewees (p.222). In fact, I discovered this situation occurring among my students as they selected and evaluated the relevant information on the Internet. In addition, from my students' feedback in Section 6.3, they believe that the scenario problem provided is less difficult than pictures and the clips as they do the tasks of generating the questions. Unless these students' English proficiency, after receiving sufficient training, becomes better or we teachers make the PBL learning projects much easier with the assistance of enough scaffolding, it will be a disaster to have them directly perform one PBL project.

7.4. Questioning is the first and foremost strategy that EFL teachers have to instruct in EFL classes.

Questioning plays an extremely significant role in language education; it is also important in both the web search skill and PBL learning. Students cannot merely learn what question words look like. They have to practice how to use 5W1H as they face various situations either from written documents, the clips, the pictures, or from their real life. From my students' feedback, most of them are not familiar with the QAR strategy, the questioning strategy that can guide them to explore the core concept further. Besides, graphic organizers are quite effective tools to help students collect and modify their questions. All my students hold a positive attitude toward

this tool's effectiveness to raise questions; however, not all of them are that familiar with them because they, as I learned when interviewing them, are not well-informed about how to use them in their first year of learning English in senior high. If teachers could systematically instruct the class how to ask with some effective tools like graphic organizers, then these students might be able to apply this skill to other situations like searching the Internet.

7.5. It is a very smart idea to use a time-bound strategy to have the class hand in the assignments online.

One of the greatest lessons I have learned from this action research is how to manage a large class in the computer lab, especially when they are required to hand in their assignments. Whenever students entered the computer labs, they would inevitably open the online game websites, check their emails, or use their blogs. Therefore, in order to make our teaching and their learning more efficient, the time-bound strategy is the best solution to this annoying problem. After illustrating how to do the task and what requirements the task has, teachers can negotiate with the classes the time to submit the assignments online. It is better to have an exact date or time so as to avoid those annoying troubles.

7.6. Google Site is one good platform as an e-portfolio to store students' documents.

In this action research, I invited my students to set up their own e-portfolio on Google Sites. This is quite a great platform. As the teacher, I upload and display everything the class needs to know. To my students, they upload their documents and reflections, and comment on other classmates' feedback. We can access these sources anytime and anywhere. So I do recommend teachers to use this platform as their e-portfolio.

VIII. Conclusion

With the development of technology, it is inevitable that students' learning be incorporated with digital elements. Students in high school are assumed to continue their academic learning. Thus, they have to be equipped with web research skills. The reason why I focus on this skill in this action research is because I find that my students have to learn it before they do PBL learning. I hope my action research will benefit those EFL teachers who are interested in this or don't know where to start to equip their students in PBL learning. I again share the main thoughts I have learned on the journey of researching and developing the instruction of the pre-planning:

- (1) Web searching is a must-learn skill for EFL students who do academic learning;
- (2) Students learning to search the web require teachers' scaffolding;
- (3) Whether EFL students are able to do PBL learning depends on their English proficiency;
- (4) Questioning is the first and foremost strategy that EFL teachers have to instruct in EFL classes;
- (5) It is a very smart idea to use a time-bound strategy to have the class hand in the assignments online; and
- (6) Google Site is one good platform as an e-portfolio to store students' documents.

This action research merely lists something fundamental for EFL teachers to take as reference. Hopefully our students, after they know how to do both 'Internet-searching' and 'Information-searching', will be still on the way to be 'Independent-searching'!

IX. Reference

9.1. The Research Papers and Books

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9.2. Materials Used in the Instruction

Pictures A

<http://bullyingpreventionnow.com/bullying-assemblies/high-school-bullying-assemblies/>

Picture B

<http://www.stopchildbullying.org/what-is-cyber-bullying/>

The Song “Don’t Laugh at Me”

broche4me. (2007, October 31). *Don’t laugh at me* [Video file].

Retrieved from <https://www.youtube.com/watch?v=HTNVXlirF4Y>

The Clip “Words Hurt—Bullying Commercial”

OhioCommissionDRCM. (2008, December 3). *Words hurt—Bullying commercial*

[Video file]. Retrieved from <https://www.youtube.com/watch?v=1j6YA03hm4k>

The Clip “Anti-Bullying Learning and Teaching Resource (ALTER) Catholic Education Office, Wollongong”

ceowollongong. (2012, May 30). *Anti-Bullying Learning and Teaching Resource*

(ALTER) Catholic Education Office, Wollongong [Video file]. Retrieved from

https://www.youtube.com/watch?v=EA5C-1N_r1w

X. Appendix

10.1. Realia Used in the Instruction

10.1.1. Picture A



<http://bullyingpreventionnow.com/bullying-assemblies/high-school-bullying-assemblies/>

10.1.2. Picture B



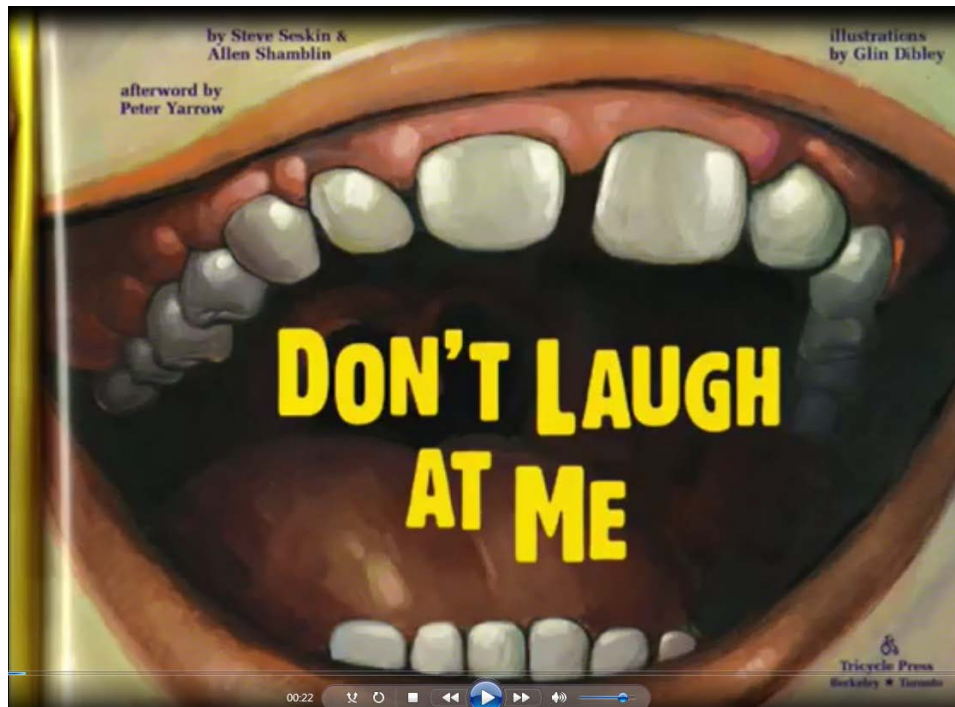
<http://www.stopchildbullying.org/what-is-cyber-bullying/>

10.1.3. The Scenario Problem

David was a high school student. He has been threatened by his classmates who asked him to give them money. David turned to ask his parents for more pocket money by pretending to have an increased appetite. Once he didn't bring enough money to school and thus got beaten by those classmates. David's parents asked

him to ask the school for help. David accepted his parents' suggestion. However, after going out of the office, the bullying classmates threatened him: "How dare you report to the school!" David was so frightened he didn't go to school.

10.1.4. The Song "Don't Laugh at Me"



<<https://www.youtube.com/watch?v=HTNVXlirF4Y>>

10.1.5. The Clip "Words Hurt—Bullying Commercial"



<<https://www.youtube.com/watch?v=1j6YA03hm4k>>

10.1.6. The Clip “The Clip “Anti-Bullying Learning and Teaching Resource (ALTER) Catholic Education Office, Wollongong”



<https://www.youtube.com/watch?v=EA5C-1N_r1w>

10.2. Handouts Used in the Instruction

10.2.1. The KWL Chart

Class _____ No _____ Name _____

KWL Chart

K — What I KNOW —	W — What I WONDER —	L — What I LEARNED —

10.2.2. The Theme-Words Catcher

Class _____ No _____ Name _____

Theme-Words Catcher

- I. Decide which clip you are about to see: *Anti-Bullying Learning and Teaching Resource (ALTER) Catholic Education Office, Wollongong.*
 Words hurt—Bullying Commercial.

II. Write down the words related to **BULLYING** you see/hear from the clips.

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III. 1. Discuss with your partners and classify the words you collect from the clip.

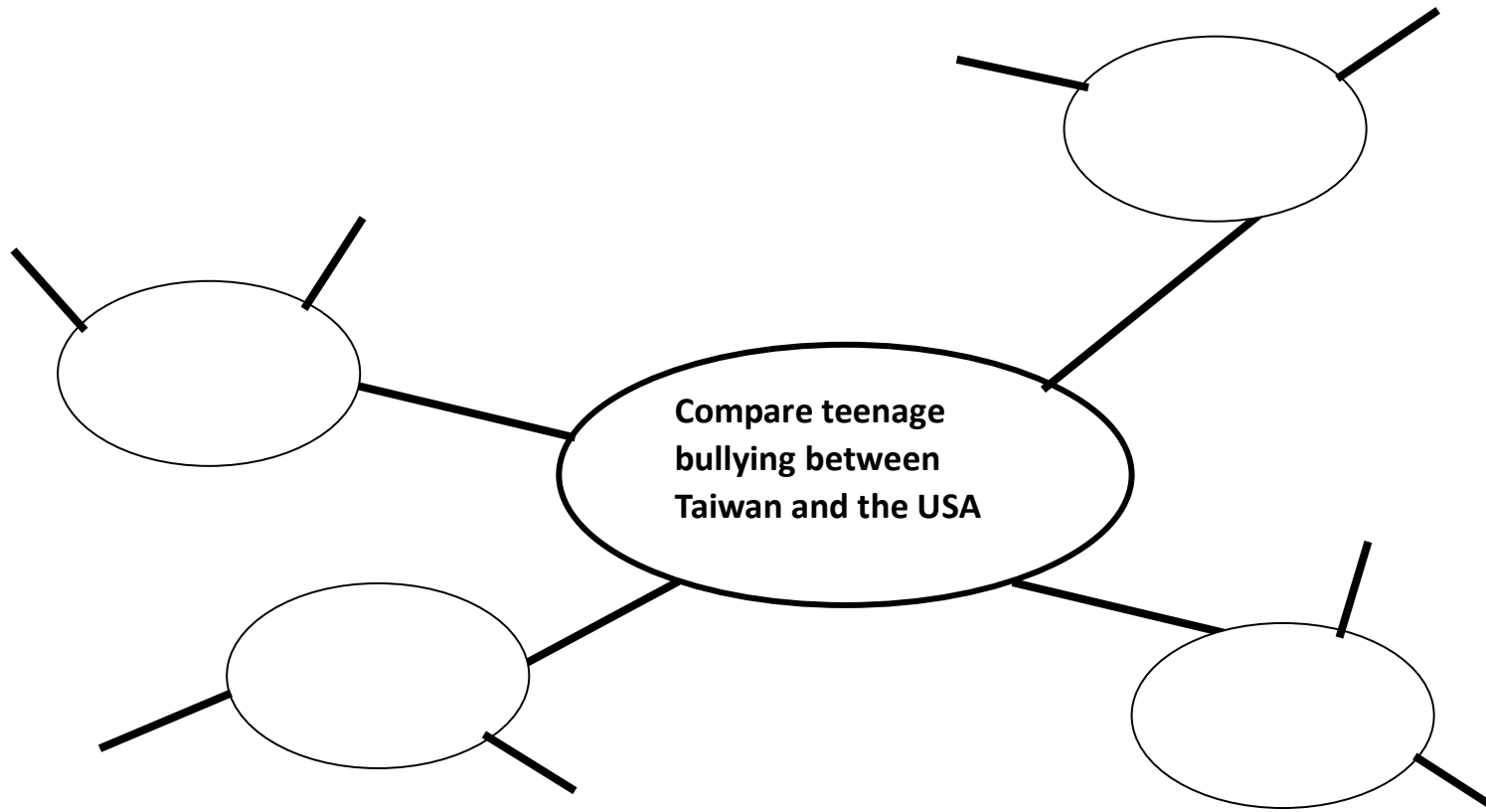
2. Decide which way to categorize the words: Based on **part of speech** Based on **5W1H**

3. Categorize those words in the following chart. 4. State the reasons you selected the way (**part of speech** or **5W1H**) to categorize words.

The way our team has decided to categorize the words is based on <input type="checkbox"/> part of speech or <input type="checkbox"/> 5W1H .	
Our reason:	
Items	
Words	

10.2.3. The Spider Web

Team members: _____



→ The question of our team: _____

10.2.4. Associating the Keywords in the Stage of Internet Searching

Class _____ No _____ Team Members: _____

Mission 5. Associating the keywords

I. The question we selected:

- What is the psychology of those bullies?
- What is different about teenage cyber bullying in Taiwan and the USA?
- How do the bystanders feel when they see the bullying happening?

II. Locate the key words and associate their theme words.

Key Word	
Relevant Theme Words	

III. Enter the keywords you came up with and record the numbers of web pages. You may figure out different ways to enter the keywords if possible.

Keywords	Web pages
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	

IV. Complete the following form:

What we found ...

Directions:

1. Discuss with your team members **4 points** you discovered after doing the activity
2. Complete the handout (including both the hardcopy and the softcopy)
3. Submit the hardcopy (teamwork—Handout “What we found . . .”) to Teacher Cynthia and email the softcopy (teamwork—Handout “What we found . . .”) to etcynthialu@gmail.com

1.

2.

3.

4.

10.2.5. Selecting and Evaluating Information

Class _____ No _____ Team Members: _____

Mission 6. Selecting + Evaluating Information

I. The question we selected:

- How do teenage bystanders from Taiwan and the USA feel when they see the bullying happening?
- What are the differences between those teenage bullies from Taiwan and those from the USA?

II. Locate the key words and associate their theme words.

Key Word	
Relevant Theme Words	

- III. 1. Select **THREE** entries as you search for information related to the chosen topic.
2. **Paste** the page descriptions for these two websites on this worksheet.
3. State the reasons **WHY** you selected this entry by listing **WHAT** you predicted based on the webpage description and **HOW** you evaluated them as necessary materials. (**English** web pages only!!!)

Entry ONE

Paste here!!!

✂Our evaluation:

1. From the webpage description:

2. From other related information (5W—Who, What, When, Where, Why):

Entry TWO

Paste here!!!

✂Our evaluation:

1. From the webpage description:
2. From other related information (5W—Who, What, When, Where, Why):

Entry THREE

Paste here!!!

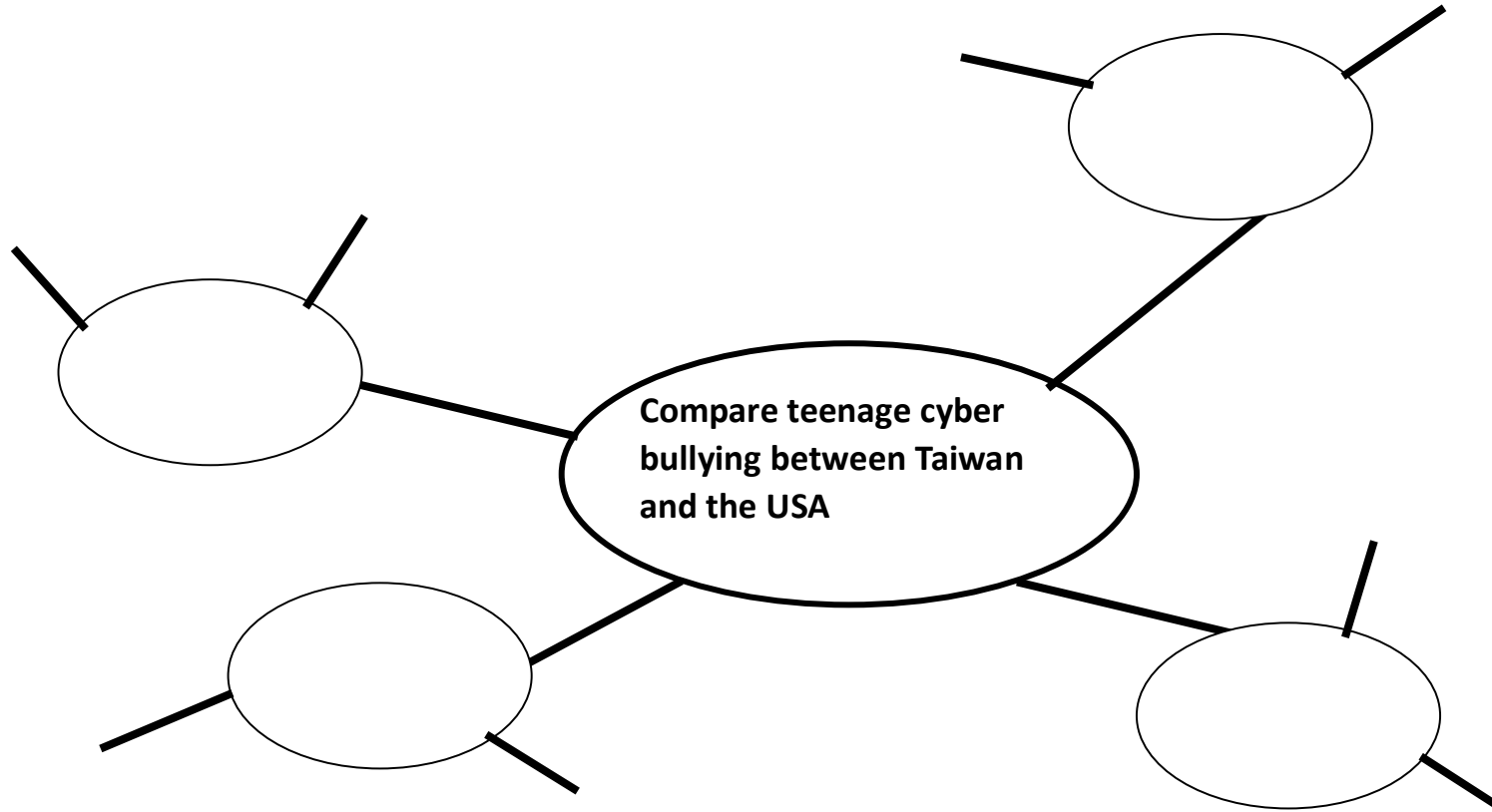
✂Our evaluation:

1. From the webpage description:
2. From other related information (5W—Who, What, When, Where, Why):

10.2.6. The Spider Web for the Project Assessment

Team members: _____

7-3. The Spider Web Chart



10.2.7. Associating the Keywords to Generate the Research Topic

Class _____ No _____ Team Members: _____

7-4. Associating the keywords

I. The assigned question: **Compare teenage cyber bullying between Taiwan and the USA**

II. Enter the keywords you came up with and record the numbers of web pages. You may figure out different ways to enter the keywords if possible.

Keywords	Web pages
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	
16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	

10.2.8. Selecting and Evaluating Information to Generate the Research Topic

Class _____ No _____ Team Members: _____

7-5. Selecting + Evaluating Information

I. The assigned question: **Compare teenage cyber bullying between Taiwan and the USA**

II. 1. Select **THREE** entries as you search for information related to the chosen topic.

2. **Paste** the page descriptions for these two websites on this worksheet.

3. State the reasons **WHY** you selected this entry by listing **WHAT** you predicted based on the webpage description and **HOW** you evaluated them as necessary materials. (**English** web pages only!!!)

Entry ONE

Paste here!!!

✂Our evaluation:

1. **WHAT** we **PREDICTED** from the webpage description:

2. We chose this entry because of the following reasons (5W—Who, What, Where, When, Why):

WHO:

WHAT:

WHERE:

WHEN:

WHY:

Entry TWO

Paste here!!!

✂Our evaluation:

1. **WHAT** we **PREDICTED** from the webpage description:

2. We chose this entry because of the following reasons (5W—Who, What, Where, When, Why):

WHO:

WHAT:

WHERE:

WHEN:

WHY:

Entry THREE

Paste here!!!

✂Our evaluation:

1. From the webpage description:

2. We chose this entry because of the following reasons (5W—Who, What, Where, When, Why):

WHO:

WHAT:

WHERE:

WHEN:

WHY:

10.2.9. Associating Keywords from the Research Topic

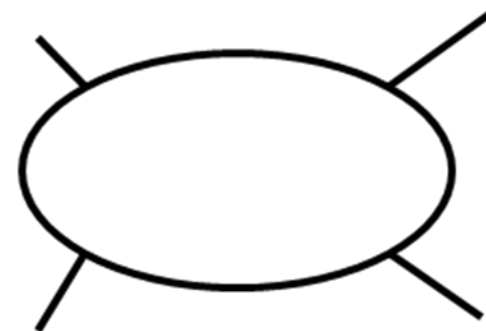
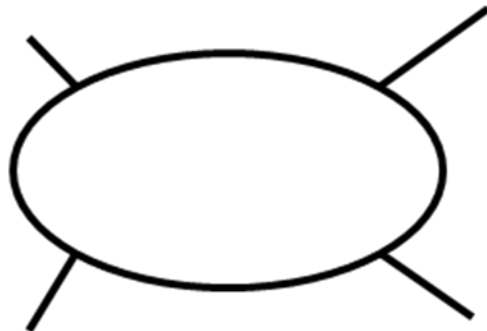
8-1 Associating Keywords

Your topic:

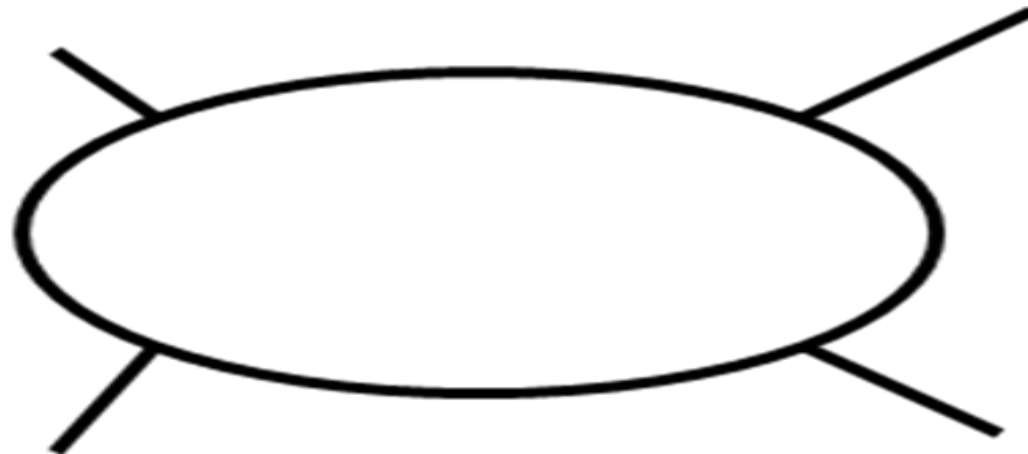
What are the different ways in which social websites are utilized for bullying by Taiwanese teenagers and teenagers in the USA ?

Directions:

1. Circle the keywords from the topic.
2. Use the spider web chart to associate the KEYWORDS. → This strategy is to help you develop your word bank to search for information!!!
3. You may fine-tune your topic if necessary.



*You may use this spider web chart to re-examine your topic.



10.2.10. Recording the keywords in the Project Assessment

Class _____ No _____ Team Members: _____

8-2. Recording the keywords

I. Enter the keywords you came up with and record the numbers of web pages. You may figure out different ways to enter the keywords if possible.

Keywords	Web pages
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
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18.	
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20.	
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22.	
23.	
24.	
25.	
26.	

10.2.11. Selecting and Evaluating Information in the Project Assessment

Class _____ No _____ Team Members: _____

8-3. Selecting + Evaluating Information

I. Our question: _____

- II. 1. 1. Select **THREE** entries as you search for information related to the chosen topic.
- 2. **Paste** the page descriptions for these two websites on this worksheet.
- 3. State the reasons **WHY** you selected this entry by listing **WHAT** you predicted based on the webpage description and **HOW** you evaluated them as necessary materials. (English web pages only!!!)

Entry ONE

✂Our evaluation:

1. **WHAT** we **PREDICTED** from the webpage description:

2. We chose this entry because of the following reasons (5W—Who, What, Where, When, Why):

WHO:

WHAT:

WHERE:

WHEN:

WHY:

Entry TWO

✂Our evaluation:

1. **WHAT** we **PREDICTED** from the webpage description:

2. We chose this entry because of the following reasons (5W—Who, What, Where, When, Why):

WHO:

WHAT:

WHERE:

WHEN:

WHY:

Entry THREE

✂Our evaluation:

1. **WHAT** we **PREDICTED** from the webpage description:

2. We chosw this entry because of the following reasons (5W—Who, What, Where, When, Why):

WHO:

WHAT:

WHERE:

WHEN:

WHY:

Entry FOUR

✂Our evaluation:

1. **WHAT** we **PREDICTED** from the webpage description:

2. We chose this entry because of the following reasons (5W—Who, What, Where, When, Why):

WHO:

WHAT:

WHERE:

WHEN:

WHY:

Entry FIVE

✂Our evaluation:

1. **WHAT** we **PREDICTED** from the webpage description:

2. We chose this entry because of the following reasons (5W—Who, What, Where, When, Why):

WHO:

WHAT:

WHERE:

WHEN:

WHY:

Entry SIX

✂Our evaluation:

1. **WHAT** we **PREDICTED** from the webpage description:

2. We chose this entry because of the following reasons (5W—Who, What, Where, When, Why):

WHO:

WHAT:

WHERE:

WHEN:

WHY: