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Collaborating Online: The Affordances of Online Word Processors with Students

Collaboration is a crucial component of the learning process. Research on the Interactive-Constructive-Active-Passive (ICAP) framework hypothesizes that learning is differentiated into four levels of engagement—interactive, constructive, active, and passive (Chi and Wylie 2014; Chi et al. 2018); the research also indicates that students who participate in constructive and interactive activities have improved learning results compared with those who participate in passive activities (Chi and Wylie 2014). The current shift in instructional practices, including online synchronous teaching, requires innovative ways for students to interact and collaborate online (Hodges et al. 2020; Pawan et al. 2022; Koehler and Mishra 2009).

As a university instructor in China, I found that using the ICAP framework to design and implement activities incorporating online word processors led to successful collaboration among students. In this article, I discuss the significance of the ICAP framework, the affordances of online teaching, and how teachers can use online word processors to engage students. I conclude with final suggestions.

THE INTERACTIVE-CONSTRUCTIVE-ACTIVE-PASSIVE (ICAP) FRAMEWORK

The strength of learning that occurs in each of the ICAP engagement levels differs linearly.

- The weakest level is the *passive mode of engagement*, in which learners receive transmitted information without overtly engaging with the information being taught.

- One step above that is the *active mode of engagement*. The parameters of this mode consist of some form of movement or physical manipulation to assist in the learning process.

- The next mode is the *constructive mode of engagement*, where learners take what they have learned and generate or produce new outputs or products.

- The top mode is the *interactive mode of engagement*, which occurs when two or more individuals work collaboratively together to construct new learning outputs; it is considered the most robust of the four modes regarding learning gains.

> **Activity 1 is an online reading lesson to help students develop their ability to use prior knowledge. The goal is to facilitate opportunities for students to construct connections between what they are reading and their prior knowledge and experiences.**

Each mode exists on a continuum and results in different learning outcomes (Chi and Wylie 2014). Teachers must decide what activities are appropriate for their students and lesson objectives. For key lesson points, teachers might choose to develop activities tailored to specific modes of engagement (Antonietti et al. 2023; Henderson 2019). Teachers, thus, can apply the ICAP framework to design activities appropriate for their online lessons (Wekerle, Daumiller, and Kollar 2022).

ONLINE TEACHING

Online teaching requires pedagogic practices appropriate for the online learning environment (Koehler and Mishra 2009; Mishra and Koehler 2006). Planned online classes generally use a combination of synchronous (real time) and asynchronous (not real time) modalities for lessons designed, developed, and evaluated over a long period. Teachers may use the numerous apps and software available for such classes (Pawan et al. 2022). These tools help teachers engage students in the learning process, although they need to be aware of the technologies and know how to use them effectively (Koehler and Mishra 2009). Teachers need time and guidance to experiment with and identify activities appropriate for their students when teaching online (Henriksen, Gruber, and Woo 2022), and the ICAP framework helps in that process.

ONLINE WORD PROCESSORS

Online or cloud-based word processors like Tencent Docs or Google Docs allow individuals to write and edit with software on a computer or online using a web browser. With these online word processors, students

can collaborate virtually. As students work, their teachers can instantly monitor their progress. Online word processors also allow multiple users to work simultaneously and have been used pedagogically with students in numerous ways, typically for writing instruction (Ebadi and Rahimi 2019, 2017; Hoang and Hoang 2022; Pawan et al. 2022). Instructors can use the word processors for both asynchronous and synchronous online activities. Students can use them individually as they work independently or with small groups in breakout rooms; if students work in groups, teachers can monitor what each group is doing without entering each breakout room.

As I developed my lesson plans for several online lessons in my intermediate undergraduate English course at a university in southern China, I realized I could use the free online word processor Tencent Docs to engage my students. Given my teaching situation, I needed to use an online word processor that worked within a Chinese context. Teachers in other situations may prefer to use Google Docs, which is available in many languages. Other possibilities include Microsoft Word 365 and WPS Docs. Each of these tools requires users to have an account. If teachers already have one, such as with Google, they can log in to access the company's online word processor.

ACTIVITIES USING ONLINE WORD PROCESSORS

Following are two activities I developed for my online lessons.

Activity 1. Pre-reading Task
Activity 1 is an online reading lesson to help students develop their ability to use

In Activity 2, students continue to apply their prior knowledge to the reading text individually and in small groups.

prior knowledge. The goal is to facilitate opportunities for students to construct connections between what they are reading and their prior knowledge and experiences. Making these connections allows students to apply what they learn to different contexts (Farrell 2009; Quigley 2020; Koda 2008). To facilitate this lesson, I created a Tencent Document and we used Tencent Meetings for the online class.

My goal was for students to begin applying their prior knowledge. The pre-reading activity took about 15 minutes, and we followed these eight steps:

1. At the beginning of the lesson, I provided students with a link to the Tencent Document in the chat box. I asked them to open the document within their web browser. Students also could access the Tencent Document via the class's learning management system—in this case, Blackboard. Additionally, I shared the document on my screen so the students could see it when we were together in the main meeting room.

2. To prime students to use their prior knowledge related to the reading text—"For Sleepy Hong Kong Residents, 5-Hour Bus Tour Is a Snooze" (Fung and Cheng 2021)—I asked them to share on the Tencent Document their experiences related to sleeping on different forms of public transportation, such as airplanes and trains.

3. I demonstrated by sharing an experience I had and wrote my response on the document.

4. The students then wrote one or two responses based on a list of different modes of transportation. They had five

minutes to remember an experience and type their response in the online document.

5. As they wrote, I provided feedback on the content and encouraged students on what they could share if they felt uncertain about what to include.

6. After they finished writing their answers on the document, students took two or three minutes to read what everyone wrote.

7. They next spent five minutes commenting on the various answers. I moderated to ensure everyone was respectful.

8. I finally reminded students to remember what they had written as they read the text for the first time. I asked them to consider the similarities between their experiences and what they would read in the article.

This before-reading activity allowed the students to practice using their prior knowledge. I also had the opportunity to observe how well students were engaged with the lesson. With this constructive activity (Chi and Wylie 2014; Henderson 2019), students used their background knowledge to make connections with the reading text. They also actively produced information to share with the rest of the class.

Activity 2. Application of Prior Knowledge While Reading

In Activity 2, students continue to apply their prior knowledge to the reading text individually and in small groups. This activity took us about 55 minutes to complete. In this activity sequence, the students read through the text two times. The first time, they read independently for a general understanding.

They then applied their prior knowledge to the reading text in small groups in breakout rooms. In my context, I provided students with a PDF version of the text via the chat function and included a copy of the article on Blackboard.

The first reading took a little under 15 minutes and included the following four steps:

1. I directed the students to take five minutes to read the text and discern the general ideas of the article.

2. I then assigned them to breakout-room groups of three or four students to discuss their thoughts regarding the text's main points. I allotted about eight minutes for this discussion.

3. As they talked about the text with one another, I monitored their breakout rooms and helped when needed.

4. After their eight-minute discussion, they rejoined the main room and, over the next five minutes, reviewed what they ascertained as the text's general points.

The second reading took about 25 minutes. Students applied their prior knowledge regarding the topic by writing their thoughts directly on the Tencent Document. I created a table with several rows and two columns. Each paragraph of the text was placed in a separate box of the left column, and the right column contained blank boxes for students to write instances representing their prior knowledge. We went through these four steps:

1. In groups, students discussed each paragraph for about ten minutes. I asked them to apply their personal experiences or knowledge to what they read.

2. One person from each group then wrote down the group's ideas. For example, one paragraph in the article explained that many Hong Kong residents experience insomnia; some groups wrote in the box next to this paragraph their experiences with insomnia. Students had roughly five minutes to complete this step. Non-writing students provided suggestions on what to write. Some students also helped with revising and editing what was written.

3. Students took five minutes to read the examples from the various groups.

4. We then compared their answers for about five minutes.

We concluded this activity with a summary discussion that took about 20 minutes. I asked the students to review what they had done and initiated the following four steps to develop their metacognitive awareness by recognizing the benefits of applying their prior knowledge to the text.

1. I asked students to spend five minutes in their groups to discuss how using their prior knowledge helped them better understand the text.

2. They then designated someone in the group to write their answers on the document (not the same student who had done the writing in the previous stage of the activity). They had five minutes to write their answers. The other students in the group were asked to help the writer revise and edit what was written.

3. I monitored the students by entering the different breakout rooms. While my main purpose was to observe, I did offer support and guidance when asked or when I felt it was needed.

4. After each group had written their answers, we spent about eight minutes reviewing what they wrote, summarizing the benefits of using their prior knowledge, and answering questions that came up regarding the use of prior knowledge.

> **Teachers can use the ICAP framework to think through possibilities and determine the appropriate activity mode for students and the desired learning outcomes.**

This activity sequence provided students with multiple forms of engagement that allowed them to practice using their prior knowledge. These different modes of engagement ranged from passive, when they read the text individually, to interactive, when they discussed it in groups (Chi and Wylie 2014). This activity allowed the students to read with purpose and collaborate with peers; it also allowed me to monitor their progress in the breakout rooms and on the Tencent Document.

FINAL SUGGESTIONS

There are many sources of reading materials available to teachers. I used an article from Newsela, as I had access to their library. Educators without access to Newsela could select articles from these sites: DOGO News, News in Levels, and Breaking News English. The texts from these sites are leveled and free to use.

Another possibility is to use a resource like *TIME for Kids*, which has current news stories online for native English speakers. Most articles, however, are leveled and can be used with students learning English as a foreign or second language. *TIME for Kids* does not require an account to access current articles. For example, teachers could use the article "A Juneteenth Celebration" (McGrath and Gibbs 2023) for students to explore the significance of this holiday in the United States. Teachers could focus their lessons on a number of topics based on the level and maturity of the students and then apply the ICAP framework to develop activities.

For constructive and interactive activities, students could explore the target vocabulary in the text and—with a focus on using contextual clues—collaborate to determine the meaning of those words and create sentences using them, inputting their work onto an online document. Students, alternatively, could work on reading skills, such as making inferences or synthesizing, to develop their understanding of the text and how to convey to others what they comprehended. They could use a Google Doc to highlight important passages and then write down their ideas as they work in breakout rooms. Students also could use this text to practice applying their prior knowledge in the way I did with my class.

There are many possibilities for applying online word processors for teaching English. While I used Tencent Docs with university students, the activities described could be used with students in secondary schools or with adults learning English online. If the decision is made to use online word processors, teachers should consider the type of activity they will develop. Teachers can use the ICAP framework to think through possibilities and determine the appropriate activity mode for students and the desired learning outcomes.

CONCLUSION

Online teaching has many possibilities, especially for reaching students unable to attend a physical classroom. The activities I have described provide a focus for students during synchronous online classes. Using an online word processor allowed my students to engage in meaningful tasks as they worked on activities collaboratively. Applying the ICAP framework to my lesson activities pushed me to determine which modes would benefit my students the most. Providing students with meaningful activities online is crucial

to maintain their focus and ensure they are learning and developing. Online word processors are one tool teachers can use to ensure their students have those meaningful activities.

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