Interactive Reflections on Gee’s *Teaching, Learning, Literacy in a High-Risk High-Tech World*

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**ABSTRACT**

The purpose of this paper is to present my written reflections on thirteen chapters of a book entitled “Teaching, learning, literacy in our high-risk high-tech world: A framework for becoming human” (see Gee, 2017). My reflections aim to answer the following inquiry: what can be learned from the book in preparing our students to thrive in this fast-changing and highly complex world? Using the dialogue-based data representation approach, I complete the reflections with the relevant literature, stories as an Indonesian citizen, and my past experiences as a doctoral student, coupled with my professor’s written responses. In the end, the reflections result in practical points as the answers to the inquiry, such as interacting and learning from other people beyond classroom walls, creating a playful environment, exploring new things, and being reflective learners. Guiding questions for further research explorations and practical implications for language teaching are also presented.

**INTRODUCTION**

When we talk about learning and development today, we have put school into the larger context of diverse teaching and learning practices, diverse literacy and media practices, and diverse things to know and be, in and out of school. Isolating school from teaching and learning out of school will harm children and lead to even greater inequality of opportunity and results. (Gee, 2017, p. 5)

This paper presents my written reflections on a book entitled “*Teaching, learning, literacy in our high-risk high-tech world: A framework for becoming human*” (see Gee, 2017). The book was written by James Paul Gee, the Mary Lou Fulton Presidential Professor of Literacy Studies and a Regents’ Professor at Arizona State University in the United States of America. Through the reflections, I aim to answer the following inquiry: *what can be learned from the book in preparing our students to thrive in this fast-changing and highly complex world?*

The reflections should interest university lectures and school teachers. They might learn diverse teaching and learning practices to help students comprehend skills to address real life-world needs beyond classroom walls. The paper might also demonstrate a reading strategy of making text-to-self, text-to-text, and text-to-world connections (see L’Allier & Elish-Piper, 2007; Pardo, 2004) to comprehend a long reading text (e.g., a book). In making text-to-self connections, readers relate what they read to their personal experiences, feelings, and thoughts. In making text-to-text connections, readers relate their readings to other sources (e.g., journal articles, magazines, newspapers, or other related sources) they have read. Meanwhile, in making the text-to-world connections, readers relate their readings to what is going on in the world (outside of school), some
famous people, or (historical) events in their life. The lecturers and teachers can adapt the making connection strategy in their reading class as an alternative to a reading summary task, in which students usually like to “write down everything, write way too much, or copy word for word” (Jones, 2018, n. p.).

Researchers in the field of (English) language, literacy, and technology should also find the reflections fruitful as they can find some guiding questions for their future research explorations. Methodologically speaking, they might also learn a different way of knowing and data representation techniques from this paper. I now describe the method of the study.

**METHOD**

This paper provided descriptive accounts based on observations or experiences (following Ary et al., 2019). The accounts were my written reflections on thirteen chapters of the book (see Gee, 2017) connected to real-world situations, my stories as an Indonesian citizen, and my previous experiences as a doctoral student in a university in the Pacific Northwest of the United States. To provide more fruitful discussions, I connected the accounts with relevant literature and showed my professor’s responses to the reflections I submitted to my class in the Spring 2019 semester. In that case, I initially emailed my professor to ask her permission to use the responses as supporting data in this paper, and she allowed me to do that. I also displayed two figures to support my reflections. All of the reflections and feedback were then read several times; key sentences or phrases were highlighted to answer the inquiry. In the next section, using the dialogue-based data representation approach of Grant and Zeeman (2012), I will present my reflections. Readers of this paper have the freedom to reflect on my words, reveal what was in my mind, and see the reflections from their point of view (Anttila, 2007). They might also agree with or challenge some ideas in my reflections. I used *Calesia* (pseudonym) to refer to my professor and *Calvin* to present myself in the written dialogue.

**MY REFLECTIONS**

“A key goal of schooling and human development is the creation of people who are committed testers, people who respect evidence, seek ways to falsify their own beliefs, and engage in civil critical discussions with others who do not share their beliefs or values.” (Gee, 2017, p. 15)

**Doing Collective Intelligence**

In chapter one, I am very much interested in the idea of collective intelligence (CI), which encourages me to work together in harmony with culturally, socially, and academically diverse people to solve real-world problems that have now become more complex. Without CI, I might have narrow expertise, which, according to Gee (2017), can lead me to think that my knowledge is the best as it can answer all complex inquiries in this fast-changing world. With the narrow expertise, I might also underestimate what I do not know.

*Calesia*: *Plus, it’s so much more fun to learn amongst and with others, don’t you think?*

However, as Gee (2017) stated in the chapter, implementing CI might be challenging as I have to communicate with people who have different perspectives from me and those who question my perspective.
Further, I translate CI as a proponent of an interdisciplinary study like what I experienced in the Fall 2018 semester. For instance, in my research epistemology course, the classroom discussions on Romero-Little’s (2006) practices and approaches to indigenous languages reminded me of my experiences as a citizen in Yogyakarta city of Indonesia and its local-culture-based educational system. In my elementary school in Yogyakarta, I had an opportunity to study Javanese language, learn, and practice reading and writing its script (see Figure 1) back in the 1990’s period.

Figure 1. The Javanese script
(Taken from https://commons.wikimedia.org/wiki/File:Hanacaraka-jawa.png)

The script is now written for some street signs in Yogyakarta to maintain the city’s local culture (see Figure 2 below as an example).

Figure 2. Some street signs in Yogyakarta

In a school setting, ensuring the place of the local language as a learning subject in the school curriculum and bringing more local (e.g., Javanese) stories as reading classroom materials, in my
opinion, can help to revitalize local languages or stories of a place. My question is: have the schools taken an active part in revitalizing local culture and languages? Gradually, I now understand why my father often told me during our dinner time on weekends that I should write a book about stories of a traditional village of Ende, Wologai at East Nusa Tenggara, Indonesia, the place where he was born, to keep the local stories “alive.” At this point, I might need to implement the concept of CI by collaborating with the local people in the village, fellow researchers from cultural studies, and a professional Indonesian-English translator to complete the project. Nevertheless, will CI threaten (or strengthen) an existing study program that focuses on a specific (narrow) learning subject?

Calesia: I hope not. Hopefully, all programs want to learn and grow.

Learning from Past Experiences to Achieve a Future Goal

At the beginning of chapter two, Gee (2017) made an explicit comparison between the computer that never forgets and humans who “forget things all the time” (p. 7). For me, this statement is so funny but true! Therefore, teachers should not teach their students to memorize theories, which they might forget sooner or later. Gee stated that humans could remember their lived-experiences very well. My task as a human being is to frame and use my experiences to achieve a clear goal that is meaningful to me. Doing this practice will benefit me cognitively. Based on this statement, I always feel that my past writing experiences, including my failure and success in publishing my article in academic journals, now have made me feel more confident when I write a paper in English regardless of limited vocabulary and the naturalness of sentences that I am still facing.

Calesia: The more you write, it will get a little easier, but writing is work.

Another point in the chapter is about being a proactive agent. I hope “to participate not just spectate and produce not just consume in ways that matter positively for one’s self, others, and our shared world” (Gee, 2017, p. 17). Therefore, I pray that I can, for instance, keep sharing more empowering blog posts about studying abroad (read https://calvinio.blogspot.com/p/seleksi-berkas-study-objectives.html) to the world so that fellow students and teachers can feel more confident to apply for an overseas scholarship.

Calesia: Calvin, you will!

Being Adaptive to the Fast-Changing World

In chapter three, Gee (2017) reminded me that I am now living in an uncertain world; something can always go wrong; people’s comfort can cause discomfort for other people. The world is also changing fast. Dealing with technology, I would like to share the fast-changing situation in the transportation service in Indonesia that can help to demonstrate Gee’s theories of the uncertain world. Indonesian people gradually start to prefer online transportation services due to their low cost and flexibility. For instance, to use the service of GOJEK (visit https://www.gojek.com/en-id/), one of the leading online transportation companies in Indonesia, I can simply turn on my smartphone, install the GOJEK application, and request a car driver to pick me up in a location by merely touching my phone screen.
It sounds like our version of uber.

I feel so comfortable with the online service, which was reported to discomfort the conventional (non-online) taxi drivers who seem not to be ready with the fast-changing situation (see Hamdani, 2017; Tiba, 2016).

A similar situation also happens in education. My study program in Indonesia has explicitly stated the integration of technology in teaching and practices into its mission statement. This statement can signify that all lecturers gradually need to use technology to support their teaching instructions and students’ language learning activities. However, are all of the lectures ready to integrate the technology? Does the mission statement cause a little discomfort to some lecturers? How can we respond to the mission statement more positively?

These would be great research projects. Calvin, as a younger future professor, you may be teaching tech to your colleagues.

Gee’s (2017) discussion in chapter three has also helped me to be a wiser individual. I need to test how I interpret, reason, and make sense of something in my life. I also need to learn to be more open-minded to engage in critical discussions with more people of different races, cultures, religions, and points of view. Besides, I should learn to accept differences in ideas with other people and the fast-changing situations in the world. I should also be careful with my attitudes and words that I say to other people. Once in a while, I should talk to my academic advisor about the ideas I write in this reflection and ask for his responses. I believe that he can be my role model in performing all the things that I have mentioned above.

All of this takes time. You are fortunate to be on a campus with lots of diversity to learn from.

Learning from Failure

In chapter four, two points are beneficial to my personal and academic growth. The first one is about the concept of play that tells me not to be afraid of failure, “allows me to take risks, explore, and try new things” (Gee, 2017, p. 34).

This statement also reminds me of two famous quotes from Paulo Coelho; Be brave. Take risks. Nothing can substitute experience, and from Winston Churchill; Success is not final, failure is not fatal; it is the courage to continue that counts. Therefore, I now can challenge myself to create a “playful environment” (Gee, 2017, p. 34) where, for instance, I am brave to send some papers that I wrote in my courses to reputable academic journals. Then, I can see how things go. If my paper is rejected, I can revise the article based on the reviewer’s feedback and send it to another journal.

The second one is about having two-way interactive conversations about experiences. Therefore, soon after hearing from the journal, I need to share my publication experiences (e.g., the success or failure to publish in the journal) with my academic advisor or colleagues. As Gee discussed in chapter four, I can talk about my success or failure and other things that I can do to enhance my writing practices and let them provide some inputs. The challenge is about how I can
use technology to facilitate this interactive (constructive and meaningful) communication with my students in Indonesia.

Calesia: Good goal and another good research project!

Paying Attention to Different Types of Communications

I would like to relate the talk and language development theories in chapter five to my experiences as a doctoral student. First, I observe that most of my professors like to use the “explicit forms of language” (Gee, 2017, p. 50) when communicating through email. The email usually consists of less than five sentences that explicitly state the point my professors want to say. I am getting used to doing the same thing when I send an email to my professors. A formal and explicit language is needed in writing the email. Second, I met Professor Alverina (pseudonyms) at a potluck party to celebrate the end of the seminar class in the Spring 2019 semester. I greeted her by saying good afternoon, Professor Alverina; how are you? She replied to my greeting and asked me to call her Aleverina (without the academic title). This situation is so much different from that in Indonesia, where I usually need to address my teachers or other senior people more formally. Therefore, I support Gee’s (2017) argumentation that “teachers should pay attention (and inform their students) to different types of talk, to their connections to writing (and speaking), and to how they are used for various functions in society” (p. 57).

Calesia: Nice connection!

Knowing Goals of Actions

In chapter six, Gee (2017) stated straightforward points that I should know my writing/speaking goal, who my audiences are, and what I want my audiences to see me (my identity) through the writing/speaking. However, I am challenged by the statement, for instance, that I must design my language and invite my listeners to hear what I say and interpret it from a perspective of a particular identity that they can take on. Relating it to my blogging practices (e.g., visit https://calvinio.blogspot.com/), I can ask: do I need to keep the same (informal) communication styles in my blog that is intended for fellow Indonesian students and teachers? Should I contact some people that have responded to my blog posts to hear more about their perspectives about the posts? Should I contact them to give feedback about things I can do to make the posts more interesting or engaging for my Indonesian audiences?

Calesia: Why not if it might build your audience?

Like Zawilinski (2009), I also learn that my blog can also function as a mirror to reflect on my thinking. In the article, Zawilinski provides the link to access the mirror blog. The one that I like to read is by Kevin Bibo (visit http://calteacherblog.blogspot.com/). His posts are typically short but, in my opinion, very reflective and encouraging. If you are working as a teacher, I suggest you read his blog posts: don’t quit (visit http://calteacherblog.blogspot.com/2014/01/dont-quit.html) and don’t quit (part 2) (visit http://calteacherblog.blogspot.com/2017/02/dont-quit-part-2.html).
Joining Interest-Driven Collaborative Groups

Don’t judge people by their profession. “It is possible today for people of very different ages, and backgrounds to become experts in almost any domain without a formal degree or to credential” (Gee, 2017, p. 95). Chapter seven brings a point about knowing, doing, and being. I translate the idea that learning should not stop in classrooms by merely learning theories. Instead, I should benefit myself and many other people in the world using the theories that I learn from school. The concept of having a good judgment system also attracts my attention. Gee stated that this system could help people understand if what they do will result in positive outcomes. The system will also tell them what good things to do next if they experience failure. I agree with what Gee suggested in the chapter about joining interest-driven collaborative (online or offline) groups where I can interact, learn from people working in the same profession, and later enhance my judgment system.

Calesia: Our goal as teachers is to teach our students to learn on their own; [...] they can use YouTube, the Internet to learning, or anything if they want to.

Personally speaking, I have been experiencing what Gee discussed in the chapter, especially in my work as a researcher. For example, I find it very useful to learn academic writing theories in my master's program in Indonesia and implement them to write three articles published in journals in 2015 (see Mali, 2015a; Mali, 2015b; Mali, 2015c). Also, I get many valuable ideas and resources on publication (e.g., Board of Editors TEFLIN Journal, 2012; Renandya, 2014) after I joined a closed Facebook group, namely Teacher Voices, several years ago.

Calesia: Great! I am glad that you are in an interest-driven collaborative group to learn.

Being a Contributing Individual

In chapter eight, I am very much interested in the Pareto principle (also called the 80-20 rule). For instance, dealing with the publication, Gee stated that 80% of the publications in the academic field come from 20% of the academics in the area. In my view, Gee wants us to be those in the 20% sides in a positive way, the ones who love and are passionate about what we do. As a teacher, I should always help my students grow with their passion.

In this chapter, Gee again discusses the concept of CI, which emphasizes the essence of working together with other people to solve real-world problems that gradually seem to be more complex, and that cannot be solved with only a particular skill. I concur with Gee that, in a group work, each group member has a different background and brings his/her personal experiences or world view. However, all members should have equal opportunities to share ideas and compare them with one another. Then, they can build plans based on the shared thoughts, and none (e.g., those in the 20% group sides) can determine any decisions or solutions formed in the group. I believe that these are the ideal criteria to make the CI activities run well and result in fruitful solutions to solve real-world problems.

Calesia: And hopefully, this how classrooms are set up too, learning from each other and being a contributing student.
I have some reflective questions: (a) Can we do it in our working places? (b) How to deal with an individual who perhaps likes to dominate the discussion or even influence the decision-making? (c) How can we minimize our conflict of interest in CI-based activities?

**Calesia:** Haha! I have been working on this one in our own class. All voices and perspectives matter, not just the vocal.

### Developing Various Skills and Identities

There are two points I would like to discuss in chapter nine. First, Gee (2017) made an important statement that many jobs in today’s world will disappear in the future, and new forms of jobs will emerge. In this case, I agree with Gee that the fast-growing Internet technology has “killed” many jobs. As an example, in my hometown in Yogyakarta, Indonesia, a prominent newspaper company, *Bernas*, is closed as people seem no longer interested in buying the printed newspaper (Chairunnisa, 2018). This fact is so sad.

**Calesia:** Yes! Newspapers are dying here too.

On the other hand, the Internet can be a blessing for many people, specifically in Indonesia. For instance, they can now cook meals from their house and sell them through an online application, namely *Madhang* (see https://www.instagram.com/madhang.id/). Another example is selling products to a broader audience through the online-shop platforms, such as *Tokopedia* (https://www.tokopedia.com/) or *Bukalapak* (https://www.bukalapak.com/). Therefore, I see the importance of bringing these issues to the classrooms and inviting people or alumni who have these new-emerging jobs (e.g., online sellers, online newspaper producers, or YouTubers) to come to schools and share their experiences with teachers and students.

Second, Gee’s discussions on relational identities make sense to me. I realize that a label that I give to myself sometimes limits me to learn other things. For instance, I call myself a university lecturer and researcher who might only develop the skills related to these roles. I understand that Gee encourages his readers (and me) to grow other various skills in responding to the changing world. I imagine that I should be a lecturer who can teach, research, and enhance other passions such as developing a website for various purposes, opening an online English course, or perhaps managing *Airbnb* rooms business in my house.

**Calesia:** Good thinking, Calvin. We all need to be more than just academics. It is important to be many identities.

That point reminds me of a multi-talented person in Indonesia, namely, Dr. Tompi. He is a doctor, but he also works as a Jazz singer (watch https://www.youtube.com/watch?v=vuLRBd2oiPU), a photographer, a director, a songwriter, and a presenter. Can today’s schools help students to be as successful and multi-talented as (or better than) Dr. Tompi?
Being in Affinity Spaces

In chapter ten, I am interested in the idea of affinity spaces that Gee (2017) discussed. He instances that learning about the Catholic religion can be done in schools and at home or through sports and social events (or other related affinity spaces) where people are connected through similar interests. Therefore, it is essential for me as a graduate student, a teacher, and a researcher to be able to spot the spaces (other than just classrooms), where “learning, mentoring, or teaching can go on simultaneously” (Gee, 2017, p. 114) and where I can grow professionally. At this point, I like Gee’s ideas that we can always go back and forth between the new spaces we find and the old ones (without any final destinations). For instance, if reading a statistics book does not help me understand the concept of experimental design, I perhaps need to go to YouTube (a new affinity space) to watch people talking about the design. I can also join a free tutoring program available at my campus to meet statistics tutors who could help me comprehend the concept. Further, Gee also reminded us to be a life-long learner who always keeps looking for new challenges, learning new things, growing, and moving forward. Can today’s schools provide various affinity spaces where students can grow and become life-long learners?

Calesia: This needs to be our ultimate goal as K-20 teachers.

Trying to Find Learning Opportunities in Every (New) Environment

I have never played the games (e.g., Civilization, Call Duty, Dragon Box, and The Sims) that Gee (2017) introduced in chapter 11. However, Gee tells the case of Alex, who, in my understanding, has successfully gained various skills through her time playing the Sims and interacting with the affinity spaces (e.g., tutorial websites, face-to-face contacts, and photoshop) in the game. For instance, Alex, on her site, can share how to create custom characters using Photoshop editing tools and how to recruit more readers for her stories. In my case, I had successfully created an escape room game (visit http://roomescapemaker.com/u/calvin/CALLme). To publish the game online, the website owner had to review it first, and I got rejected three times. From this experience, I might learn the essence of listening to other people (e.g., the reviewers) and the spirit of not giving up quickly in solving problems, which might be slightly different from what Alex gained from the Sims.

Calesia: Great connection!

It would be fruitful if Gee, for instance, provided a lesson plan along with teaching instructions on how to travel in the infinity spaces of the Sims game.

Calesia: They probably are on the Internet too.

Being a Committed Tester and Caring Individual

The discussion on the human microbiome in chapter 12 reminds me that as a teacher, I should not only focus on transferring knowledge to my students but also care for their emotions and well-being. Perhaps, I should learn from my research advisor of my master thesis. At that time, I always had a good time with him because he could be like a father. After discussing my thesis, he liked to ask how my life was going and my plans after graduation. He sometimes shared
experiences in doing his master's study overseas and his struggle when writing a master thesis. These are small things that mean a lot to me and, I believe, play a big part in my success in finishing my study in time.

Calesia: Personal/caring relationships help us.

In chapter 12, Gee (2017) once again reminds his readers to be a committed tester. Indeed, I am now committed to trying things out, paying careful attention to how the world or other people respond to what I have done, and engaging in critical discussions with others who have different views from what I do, all of which, according to Gee, can make me a better person. Therefore, I can say that there is no reason to be afraid to receive critical (challenging) feedback from my dissertation committees as I see them as a golden ticket to make me (and my research work) better. Being a committed tester also tells us that failure is not the end of life.

Calesia: They want you to have an outstanding dissertation. All of their feedback will make you stronger.

Being an Open-Minded Person

The discussion in the last chapter is also in harmony with that in the previous section. Gee emphasizes the importance of being open-minded to interact with people who have different perspectives, cultures, religions, or educational backgrounds. People should regard that interaction as an opportunity to learn from others and make their life-framework better. To respond to this, I believe that students should be given more opportunities in classrooms to share their (encouraging, empowering, or positive) stories, for instance, related to their culture. The teacher should then guide the reflective discussions where all students can build on each other’s ideas and take any differences to learn and grow. Gee has provided me with clear and practical steps to be a hero for my own life, students, society, and the world. I would like to end my reflections with Gee’s (2017) words to encourage readers of this paper “to see failure as good for learning and as a form of exploration and even encourage them to invite failure on the way to making progress” (p. 160).

FINAL WORDS

The paper aims to answer the following inquiry: what can be learned from the book in preparing our students to thrive in this fast-changing and highly complex world? As the answer to the question; we as teachers need to encourage our students to:

• interact and be open-minded to learn from other people (e.g., who have different racial, cultural, and educational backgrounds) outside classroom walls
• produce knowledge that positively impacts one’s self, others, and (hopefully) the world
• be brave to develop new skills other than what they learn inside classrooms
• have hands-on and meaningful learning experiences beyond memorizing learning theories
• actively find (online or offline) affinity spaces where they can meet people with similar interest, communicate, and learn from them
• create a playful environment; explore new things, and be not afraid of failure
• attribute failure as a golden ticket to make future progress
• be reflective learners; always pay careful attention to what they do and how the world responds to what they have done
see a case or a problem from diverse perspectives and academic approaches
be a life-long learner

The points mentioned above might offer several teaching recommendations for readers of this paper. As an example, university lecturers teaching English as a Foreign Language (EFL) in higher education might work together with their students to publish class assignments (e.g., poems, posters, academic essays, research articles, or English speaking videos) in a journal, class blog, online magazines, YouTube channels, or other online platforms. In that way, hopefully, their publications can positively impact more people outside the classes. Second, the lecturers can assign their students to join some (EFL-related) interest-driven collaborative groups, write three to five lessons they can gain from the groups, and present the lessons in a class session to learn from one another. Third, the lecturers can challenge their students to join and (if possible) present their academic papers in (undergraduate or graduate students) conferences or symposiums where they can meet people with various backgrounds or similar interests, communicate with, get inputs, and learn from them. As a reference, some conferences where I presented my academic papers as a graduate student are the Graduate Students Conference by Sanata Dharma University (visit https://www.instagram.com/gsc.usd/), and the Palouse Language & Culture Symposium by the University of Idaho (visit https://www.uidaho.edu/academics/ipo/intensive-english-alcp/palouse-language-and-culture-symposium). Fourth, the lecturers might try to allocate regular (playful) class time (e.g., every month) where their students can demonstrate using new technology applications they learn from a book or YouTube videos, play with the apps, and explore potentials of the apps for supporting language learning. Teachers and students can decide who will present first and the format of the session. More importantly, all students have the responsibility to contribute to the knowledge growth of one another.

Finally, I do hope that the reflections provide data for “my endeavor to grow and transform as a teacher and scholar” (Lewis, 2018, p.1756) as well as help fellow EFL teachers and readers of this paper “to reflect on their experiences and perhaps learn from mine” (Lewis, 2018, p.1754). I end the paper with some questions that I cannot still answer in my reflections:

- Will the concept of collective intelligence, as described in this paper, threaten the existence of a study program that focuses on a specific (narrow) learning subject? Why?
- Can today’s schools help students to be successful and multi-talented individuals? How?
- Can today’s schools also be proactive agents in revitalizing a local culture and languages to be “alive” in this fast-changing world and the exponential growth of Internet technology? How?
- Does the reading strategy of making connections to comprehend a long reading text (e.g., a book), as illustrated in the reflections, work well in other settings? How?

REFERENCES


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