

Chapter 3

Authentic Assessment in the Digital Age: A Brain-Based Framework with GenAI-Enabled Support – Dai Gu, Yueqing Zhong, and Bilgehan Ayik

Teaching Scenario: Using GenAI for Personalized Writing Assessment

Ms. Alvarez is a middle school ELA teacher with 20 years of experience. She loves exploring new teaching methods, but she is not a tech-savvy person, and all these GenAI storms make her feel uncomfortable. She hears about it from her friends, but she doesn't know how to use it.

She wants to improve her students' narrative writing skills. However, lately, she noticed that her students' assignments started to look similar: very complex sentences with perfect grammar. Once she shared her observations with her colleagues, she learned that some students might use GenAI in their homework. Then, she tried to do writing exercises during the class to prevent the use of GenAI; however, writing in the classroom was overwhelming for some of her students, especially for MLs, because the class time was limited, and there were a lot of distractions.

For the first time, she decided to consult ChatGPT about this situation. She asked what she could do to improve her students' narrative writing skills with homework assignments and shared her concerns about the excessive use of GenAI in their assignments. ChatGPT suggested using more personalized writing assignments so that students could share more details about their own experiences. She asked ChatGPT to design a homework assignment that requires students to write three paragraphs about plants. ChatGPT suggested assigning each student a flower and having them write three paragraphs by drawing on their own experiences and memories. Once she mentioned her students' cultures and languages, and ChatGPT offered her some flowers that she could pick for her specific students based on their backgrounds. ChatGPT even provided drawings to print. The next day, Ms. Alvarez distributed the printed flowers to her students: a cherry blossom to her Japanese student, a tulip to her Turkish student, a dahlia to her Mexican students, and many others for her native students based on their background. Students were very happy with this very colorful homework assignment.

Students submitted their assignments on time, and Ms. Alvarez noticed how most of the students made personal connections to the flowers that they were assigned to in their works. Some students still seem to use GenAI; however, their authentic narratives were also visible in their assignments. Ms. Alvarez has since started to use GenAI to tailor her assignments for each student.