Reflection on a Lesson Taught on Cropping Systems and Cultural Practices in Agriculture

Teaching the Form 4 Term 1 class on the topic of cropping systems and cultural practices in agriculture was a meaningful experience that challenged me to step out of the conventional classroom routine and reimagine the way I approach pedagogy. Traditionally, lessons in agriculture have been grounded in the use of textbooks, verbal instruction, diagrams on the whiteboard, and in some cases, fieldwork. However, this particular lesson marked a shift for a deliberate attempt to integrate modern technology into my teaching strategy by using a PowerPoint presentation supplemented with QR codes that linked students to videos and resources explaining each cultural practice in detail.

My intention for incorporating QR codes stemmed from an understanding of the current generation of learners. Today's students are digital natives. They are deeply immersed in the world of technology, navigating mobile devices, apps, and digital platforms with a level of comfort that sometimes surpasses that of their teachers. Recognizing this, I saw an opportunity not only to reach them in a format that is familiar but also to empower them with tools for independent learning and continuous revision.

The PowerPoint presentation provided the structure for the lesson—visually organizing concepts related to different cropping systems such as monocropping, intercropping, and crop rotation. It also introduced various cultural practices including weeding, mulching, irrigation, fertilization, and pest control. At each stage, a QR code was embedded into the slide, linking to relevant videos or digital illustrations that students could scan using their smartphones or tablets. This enabled a multimodal approach to learning: visual (images and video), auditory (narration in the videos), and kinesthetic (engaging with the technology to scan and explore).

The reaction from the students was overwhelmingly positive. I observed an increased level of attentiveness and participation during the lesson. Students were eager to take out their devices, scan the codes, and explore the content on their own. For some, this was the first time they had encountered a classroom experience that merged their everyday use of technology with academic content. Several students even asked if they could access the QR codes later at home, which affirmed my original intent—that these tools could serve as revision aids beyond the classroom.

From a pedagogical perspective, this experience has transformed how I now conceptualize teaching and learning. In the past, I primarily viewed pedagogy as the transmission of knowledge from teacher to student. The teacher was the expert, the students the recipients. This model, while still relevant in certain contexts, has its limitations, especially in an age where information is readily available online and students are becoming more autonomous learners. The integration of QR codes and multimedia into my lesson has reshaped this dynamic, shifting the role of the teacher from that of a sole knowledge-giver to a facilitator of learning experiences.

This shift encourages a more constructivist approach to teaching—where students are active participants in the learning process, constructing their understanding through exploration and interaction with content. It also fosters a sense of ownership in students. They can learn at their own pace, revisit complex topics as often as necessary, and explore beyond what is taught in the

classroom. It allows for differentiation, enabling students with varying learning styles and paces to engage with the material in ways that suit them best.

Another aspect that stood out to me was how this method subtly encouraged digital literacy. In a world that is increasingly shaped by technology, helping students become proficient in navigating digital content is no longer optional—it is essential. By using QR codes, I was able to embed a simple digital skill into the lesson, one that students can apply in other academic areas and even in daily life.

This experience also reminded me of the importance of relevance in education. When students see a connection between what they are learning and the tools they already use or are interested in, their engagement increases. Education becomes less of a chore and more of a journey of discovery. I noticed that even students who are typically quiet or less inclined to participate became more involved during this lesson. It reinforced the idea that innovative methods can reach learners who might otherwise be disengaged.

Of course, there were a few challenges. Some students did not have smartphones, or their devices lacked internet access at that moment. To address this, I paired students together and also provided hard copies of some of the content. In the future, I plan to include alternative access points, such as downloadable PDFs and videos stored on flash drives or school devices, to ensure inclusivity.

Reflecting on this lesson has encouraged me to think critically about the resources I use and the experiences I create for my students. It has motivated me to seek more opportunities to incorporate interactive and technology-based methods in my teaching, not for the sake of using technology, but because it genuinely enhances the learning experience. It opens up a world of possibilities: virtual field trips, augmented reality in soil and plant analysis, and even student-created content like videos explaining topics to their peers.

In conclusion, my lesson on cropping systems and cultural practices marked a turning point in my journey as an educator. The use of QR codes was more than just a novel addition—it was a bridge between traditional subject matter and modern learning tools. It reaffirmed my belief that pedagogy should be dynamic and adaptive, reflecting the realities of the world our students live in. I am excited to continue exploring how technology can deepen student understanding, increase engagement, and most importantly, make learning more accessible and enjoyable for all.