Next-Gen Educators: Growing with M2 in Teacher Preparation

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Introduction

Video technology provides an opportunity for reflection to enhance metacognition in preservice teacher preparation, boost critical thinking, and promote self-directed learning (Brookfield, 2017, Baxter Magolda, 2004, Bueno de Mesquita et al., 2010; Schunk, 2012). The importance of reflection in the learning process dates to John Dewey (1933). Using video-technology reflections for feedback and training is nothing new, but the integration of M2 technology into teacher preparation programs to promote higher order thinking and personal growth is. M2 provides unique instructional potential with live feedback (Swivl, n.d.). This feedback comes in real-time and offers strategies to elevate every lesson helping instructors reach their full potential.

M2's potential lies in the ability to capture authentic reflections and provide immediate feedback. It is not just about recording; it is about interacting. M2 allows users to dive deeper than just surface level thinking. By incorporating M2 into teacher preparation, programs can support future educators in developing a deeper understanding of their teaching philosophies, classroom strategies, and personal growth trajectories. The goal of implementing M2 into the agricultural education teacher preparation program at Oklahoma State University is to create reflective practitioners who are not only aware of their instructional choices but also intentional in their development.

How it Works

M2 is a useful reflection tool with the potential to be used for personal and professional growth. Standard reflection prompts are available, or the instructor can input specific prompts based on class needs. This flexibility ensures reflections are relevant and targeted. In addition, instructors have the capability to input rosters, making it easy for students to select their names from the M2 dashboard. Once names are selected, they have 30 seconds to reflect on each of the given prompts.

M2 can record audio and/or video during the assigned reflection. After a student completes their reflection, M2 uses artificial intelligence to analyze the response and provide feedback. The feedback helps students think more deeply while providing insights to educators to use to track student growth and identify areas for support.

Undergraduate students at Oklahoma State University engaged with M2 the first week of the semester prior to entering their student teaching centers. Students ($N = 7$) reflected individually using M2. The students reflected again during their midterm seminar and the will reflect a final time at the end of their student teaching experience. Students reflected in a secondary location to allow for privacy and authenticity using M2. Instructors customized five reflection prompts prior to implementation. An example of a prompt is:

> *Reflect on your teaching philosophy regarding agricultural classroom instruction. What role do you believe hands-on learning, problem-solving, and real-world applications should play in your curriculum delivery?*

At the conclusion of the reflection, M2 provides overview information regarding the quality of the reflection. Students can review the feedback and use it to think deeper about themselves for personal growth. This process encourages intentional reflection and supports the development of reflective educators.

Results to Date

The primary goal of using M2 was to provide student teachers with an opportunity for personal reflection and growth. Student's perceptions of M2 have been overall positive as it has helped assist with personal growth and goal setting. While the classroom implementation of M2 is relatively straightforward, setting up the educator side of M2 has a larger learning curve as the educator needs to create an account, establish the rosters, and create the custom prompts. To date our student teachers have used M2 twice to reflect. These sessions have provided valuable insight into their development as an agricultural education teaching aspirant.

Future Plans

The Oklahoma State University agricultural education program has implemented M2 reflection into undergraduate and graduate level courses previously. Faculty plan to continue to use M2 in courses with further implementation during early field teaching experiences for undergraduate students and micro-teaching lessons. With the flexibility to add multiple courses and students under a single educator makes M2 easy to implement.

As the program grows, faculty will need to consider scheduling logistics to ensure that M2 can be used effectively. Conflicting schedules may impact when and how reflections are conducted, so planning is essential. Despite these challenges, M2 has potential to be a valuable tool for teacher preparation. In addition to using the physical M2 device , the MirrorTalkAI platform that M2 runs on can be used on an internet browser, of which faculty could then assign reflection prompts to students to complete on their personal devices. While the MirrorTalkAI platform does not have all the capabilities of M2, the ability to increase reflection opportunities is of interest to the agricultural education teacher preparation faculty at Oklahoma State University.

Costs/Resources Needed

To use M2 for purposeful reflection, the purchase of a Swivl M2 is needed. The M2 comes with a large screen, 180-degree camera, stand, and a remote. The base price for a M2 is $2500. The quantity of devices needed depends on the intended use and program size. The agricultural education program at Oklahoma State University currently has two M2 devices. In addition to purchasing the M2, an annual subscription is needed. A one-year subscription is included with the initial purchase of the M2.

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