

All Around Swivl™ Bots

Bradly Cusack, Matthew McDonald, Teresa Randall
Published by *K20 Center*

This work is licensed under a Creative Commons CC BY-SA 4.0 License

Time Frame 50-60 minutes

Essential Question(s)

How can technology be used to improve an instructor's reflective practice?

Summary

This PD introduces the use of Swivl™ robots in the classroom. Participants will go through the process of setting up the bot, recording video, uploading video to the cloud, and accessing previously saved videos. Additionally, participants will discuss possible uses of Swivl bots both for instructional purposes in the classroom and for professional development. Finally, participants will generate some possible uses of their own.

Learning Goals

- Identify professional and classroom uses of the Swivl™ robot.
- Discuss the bot's role in the reflective teaching process.
- Generate ways to incorporate the bot into an upcoming lesson or activity.

Standards

InTASC Model Core Teaching Standards (K-12th)

9b: The teacher engages in meaningful and appropriate professional learning experiences aligned with his/her own needs and the needs of the learners, school, and system.
9d: The teacher actively seeks professional, community, and technological resources, within and outside the school, as supports for analysis, reflection, and problem-solving.

Attachments

- ABC Graffiti—All Around Swivl Bots.pdf
- Presentation Slides—All Around Swivl Bots.pptx

Materials

- Presentation Slides (attached)
- ABC Graffiti handout (attached; one per participant)
- Swivl™ robot kit
- Sticky notes
- Computer or device with internet access

5 minutes

Snapshot

Engage

Participants assess their familiarity with Swivl™ bots and watch a video showing how they are used in a classroom.

Explore

Participants create/log into their personal Reflectivity account and practice skills with Swivl-related vocabulary.

Explain

Participants brainstorm ways to use Swivl in their classrooms, using the ABC Graffiti template to organize their ideas.

Extend

Participants highlight some of the positive ways that Swivl bots can be used in professional and classroom settings.

Evaluate

Participants use the How Am I Feeling? What Am I Thinking? strategy to reflect on the use of Swivl bots.

10 minutes

Preparation

Each participant needs to have an account with Reflectivity by Swivl before beginning this exercise. Those who attended ADEPT recently may already have Swivl accounts—instruct these participants to log in to their accounts. Ask those who do not already have an account to go to Reflectivity and create an account.

5 minutes

Engage

Introduce the topic and title of this PD using the attached **Presentation Slides**. Display **slide 3** and review the essential question: *How can technology be used to improve an instructor's reflective practice?* Next, display **slide 4** and review the session learning objectives with participants.

Go to **slide 5**. Use the Fist to Five strategy to have participants rate their familiarity with Swivl™ bots on a scale of 1–5. Ask participants to hold up the requisite number of fingers to display their answers as follows:

- 1 = No knowledge
- 2 = Little knowledge
- 3 = Some knowledge
- 4 = Knowledge plus experience
- 5 = Could teach others how to use them

To show a Swivl bot in use in a classroom, go to **slide 6** and play the "Swivl in Use" video.

Embedded video
https://youtube.com/watch?v=QwebkHu8B3U

25 minutes

Explore

After watching the video, display **slides 7–8**. Ask participants to go to separate stations and work in small groups to complete the following tasks in order:

- **Task 1: Open the Swivl Capture app and log in.**
  - If participants do not already have an account, ask them to select **"Sign Up"** and create an account. If the Swivl Capture app is not already installed on the device, have participants download and install it before continuing.
- **Task 2: Practice setting up the device with the Swivl Robot.**
  - Place the device in the Swivl Robot, connect the marker, and check that the robot is tracking properly.
- **Task 3: Practice recording and uploading video.**
  - Use the Swivl Capture app to record a short practice video, then upload the recording to **Reflectivity**.
- **Task 4: Practice accessing recordings in Reflectivity.**
  - Have participants locate their uploaded recording in their Reflectivity library.

Once participants have had plenty of time to explore and complete the tasks, display **slide 9** to provide an overview of the Swivl bot.

Show **slide 10** to define key terms associated with Swivl, Reflectivity, and video-supported reflection.

10 minutes

Explain

Display **slide 11** and pass out the attached **ABC Graffiti** handout to each participant. Ask participants to use a hybrid ABC Graffiti/Chain Notes strategy to brainstorm ways Swivl can be used in the classroom.

Give participants 30 seconds to jot down their responses on the handout. Then, have them pass the sheet to the person on their right. Give the recipient an additional 30 seconds to add to their colleague's response. Repeat this process as time allows.

10 minutes

Extend

Presenter's Note: Positive Framing

Discuss the Swivl bot as a positive resource, not a punitive one. The K20 Center uses Swivl bots to help coach teachers in using authentic teaching and learning skills in the Authenticity and Discourse for Engagement Using Pedagogy and Technology (ADEPT) program.

Teachers using the Swivl bot can capture videos of labs or lessons and send them to fellow teachers in Oklahoma or in other states to ask for feedback. It is also possible to use the Swivl bot as a tool for teacher evaluations when traveling is a concern.

Display **slide 12**. Invite participants to read the lists and discuss some of the different uses for Swivl bots in both professional and classroom settings. Highlight selected ideas from participants' contributions, such as:

- Personal and professional reflection
- Remote observation of the classroom
- Capturing video of a lab or lesson and sharing with another teacher
- Conducting long-distance teacher evaluations

10 minutes

Evaluate

Display **slide 13**. Have participants use the How Am I Feeling? What Am I Thinking? strategy to provide some insight into their perceptions about Swivl bots.

Ask participants to divide a sticky note in half with a line (vertical, horizontal, or diagonal). On one half, have them draw an image of how they are feeling about Swivl bots. On the other half, have them write a sentence that reflects what they think about Swivl bots.

Have participants place their sticky notes on a wall or a whiteboard. Invite participants to read their own notes or read them aloud as a heuristic for a discussion of this technology. This exercise also presents an opportunity to address individual concerns and questions.

5 minutes

Follow-up Activities

Invite participants to use Swivl bots to teach a lesson or to record a learning experience over the next week or so. Ask them to reflect on their teaching practices after they have viewed one or more videos of their lessons.

Research Rationale

Video surveys expand teachers' abilities "to analyze complex human interactions such as those found in the classroom" (Stigler, Gallimore, & Hiebert, 2000, 90). Video observation provides insights into teacher effectiveness and growth (Desimone, 2009, 191). Teacher growth has been shown to occur when robotic videographers, such as Swivl bots, have been used in conjunction with reflective practices (Franklin, O'Neill Mitchell, Walters et al., 2017, 188). Swivl bots have been shown to help provide an authentic lens to assess and develop real-life practicum experiences (McCoy, Lynam, & Kelly, 2018, 8).

Resources

- Desimone, L.M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38(3), 181–199. https://journals.sagepub.com/doi/10.3102/0013189X08331140
- Franklin, R.K., O'Neill Mitchell, J., Walters, K.S., Livingston, B., Lineberger, M.B., Putman, C., … Karges-Bone, L. (2017). Using *Swivl* robotic technology in teacher education preparation: A pilot study. *TechTrends,* 62(2), 184–189. https://link.springer.com/article/10.1007/s11528-017-0246-5.
- Great Hearts Academies. (2017, February 7). Swivl in Use. [Video]. YouTube. https://www.youtube.com/watch?v=QwebkHu8B3U
- K20 Center. (n.d.). ABC graffiti. Strategies. https://learn.k20center.ou.edu/strategy/96
- K20 Center. (n.d.). Chain notes. Strategies. https://learn.k20center.ou.edu/strategy/52
- K20 Center. (n.d.). Fist to five. Strategies. https://learn.k20center.ou.edu/strategy/68
- K20 Center. (n.d.). How am I feeling? What am I thinking? Strategies. https://learn.k20center.ou.edu/strategy/187
- McCoy, S., Lynam, A., & Kelly, M. (2018). A case for using *Swivl* for digital observation in an online or blended learning environment. *International Journal on Innovations in Online Education,* 2(2). https://onlineinnovationsjournal.com/download/257b3bad622549a6.pdf
- Stigler, J.W., Gallimore, R., & Hiebert, J. (2000). Using video surveys to compare classrooms and teaching across cultures: Examples and lessons from the TIMSS video studies. *Educational Psychologist*, 35:2, 87-100, https://www.tandfonline.com/doi/abs/10.1207/S15326985EP3502_3