Further Suggestions for Jewish Education

- There are many opportunities to use VR and AR in Jewish education, specifically to "do the impossible," for example, experiencing the splitting of the Red Sea, the days of creation, or receiving the Torah at Mount Sinai.
- The use of VR for developing empathy seems to have extremely powerful potentials in Jewish education. Although the MindCET apps mentioned above are not Jewish per se, they certainly reflect Jewish ideals. The Jewish learning component in these types of empathy building apps could be taken further either through embedding Jewish text or content into them, or by exploring situations that are Jewish in nature or in context, for example, interfaith / intercultural relationships, or putting a person in the shoes of a Jewish historical figure such as Moses not being able to enter Israel or Esther approaching King Achashverosh on behalf of the Jewish people.
- VR and AR can be used for virtual visits to Israel and historical and important Jewish sites and landmarks, or for virtual interactions with events in Jewish history or Jewish artifacts. These could serve as stand-alone experiences or ones that supplement others either as introductions to or follow-ups for programs such as Birthright Israel, camp, or Poland trips.
- Games like the ones created by ConverJent, referenced earlier, could be expanded to include other locations and used in formal Jewish education settings to enhance students' learning through AR field trips in students' own or nearby communities.

Coding and Tech-Related Skills

This category is comprised of technical and "21st century" skills, including and not limited to: coding; graphic design; design thinking; simple machines; science, technology engineering, arts, and math (STEAM) projects; digital citizenship; web design; maker-spaces; hackathons and robotics. This category involves learning practical life skills, which often appeals to both parents as well as young peoples' already established interests. Furthermore, these can be used to help build community through related events, such as The Jewish Day School Maker Faire[15] and the Center for Initiatives in Jewish Education (CIJE) Young Engineers Conference.[16]

Examples

- **Code.org's Hour of Code:** Code.org provides how-to guides, videos, and materials for instructors to host an Hour of Code celebration encouraging students to learn computer science during Computer Science Education Week. www.code.org/learn
- **Scratch, Tynker, and Swift Playgrounds:** Various game-based coding instruction. www.scratch.mit.edu, www.tynker.com and www.swift.org
- **Wonder Workshop:** Pairs robotic toys with kid-friendly coding apps targeted at teaching creative problem-solving and computational thinking. www.makewonder.com
- **Tinker Crate by Kiwi Crate:** Monthly subscription service for STEM projects for ages 9-16+. www.kiwicrate.com/tinker
- **Makerspaces:** A physical location where people gather to share resources and knowledge, work on projects, network, and build spaces. www.makerspace.com
- **Minecraft Camp:** A summer camp that combines architecture projects with Minecraft. https://www.fastcompany.com/3063465/mind-and-machine/forget-blueprints-for-the-young-architects-of-tomorrow-its-all-about-minecr
- **Hackathons:** Sprint-like events in which computer programmers and others collaborate on technology projects. http://en.wikipedia.org/wiki/Hackathon
- **Breakthrough Junior Challenge:** A contest for teens to create a video explaining a complex mathematical or scientific concept. The prize is a $250,000 scholarship and a science lab for the winner's school. www.breakthroughjuniorchallenge.org/

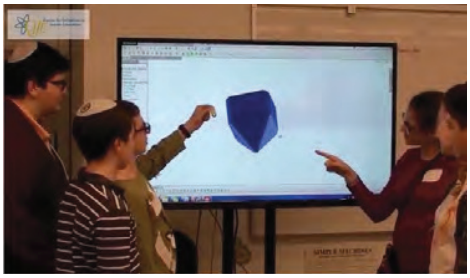
[15] *jewishstandard.timesofisrael.com/watch-jewish-maker-faire-will-blow-your-mind/*

[16] *www.thecije.org/19-schools-550-students-cije-east-coast-young-engineers-conference-2/*

- **iD Tech Camps:** Summer tech programs for ages 7-17. https://www.idtech.com/tech-camps/
- **Fisher Price Think & Learn Toys:** A line of learning toys that use technologies including scanning and coding as part of the play and to teach. www.fisher-price.com/en_US/brands/think-and-learn/products/index.html

Related Jewish Tools

- **CIJE/High School Engineering Program:** Scientific and biomedical engineering courses for high school students, which includes hands-on engineering projects, some with Jewish connections. Affiliated schools from all denominations participate in an Engineering Symposium. http://www.thecije.org/k-12-programs/cije-tech-high-school/




- **URJ 6 Points Sci-Tech Academy:** A Jewish technology summer camp for 5th-10th graders. www.6pointsscitech.org/
- **OJSC Digital Citizenship Course:** An online course that teaches digital citizenship through a Jewish lens. www.thevirtualhighschool.org
- **Israeli American Council Hackathon:** A week-long program for Israeli and American high school students who work together to create and "hack" solutions for real-world problems. www.israeliamerican.org/he/national/programs/iac-eitanim/summer-innovation-hackathon
- **Technion Rube Goldberg Competition:** A contest for students to build their own Passover Rube Goldberg, inspired by the one built by students at the Technion. http://int.technion.ac.il/technion-jewish-day-school-challenge/
- **Israel 21c:** A website that focuses on modern Israel and Israeli innovation and inventions. www.israel21c.org/

Further Suggestions for Jewish Education:

Consider blending secular education needs with Jewish educational opportunities both in school and at home, specifically in terms of these skills as they are so desired by students, teachers, and parents alike. These programs touch on learning through doing, developing real life skills, all while building community and teaching Jewish content.

Possibilities include:

- Expand and build on programs like the CIJE Engineering High School Program, teaching engineering and 21st century skills often intertwined with Jewish content. For the Jewish educators interviewed these were seen as some of the most powerful and effective programs.
- A "Tinker Crate"-like subscription service[17] for Jewishly themed items such as an electric menorah or an apple/honey dipping simple machine.
- Digital Citizenship seems like a topic that parents would welcome and value for their children both in school and at home.
- Hold Hackathons for community building and with teens and teachers, enabling them to work on Jewish Ed Tech solutions. Consider including incentives and prizes as impressive and large as the one mentioned above in the Breakthrough Junior Challenge.

[17] *Subscription services for a variety of purposes are very popular and discussed more at length below on page 33.*