



Smart Money:

Recommendations for an Educational Technology and Digital Engagement Investment Strategy

Lewis J. Bernstein and Associates | March 2017

Research Team Bios

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Dr. Michael Cohen is a developmental psychologist and President of the Michael Cohen Group, LLC, whose past thirty years of work has focused on the intersection of education, development, media, and children's well-being. He has been at the forefront of the Department of Education's research and evaluation work for the Ready-to Learn initiative. Dr. Cohen also counseled Mayor Rudolph Giuliani on the effects of trauma in the aftermath of the September 11th terrorist attacks.

Dan Victor is the founder of Victor Advisors PLLC, a law firm and media consulting practice that represents individuals and companies that work along the entire children's media supply chain. Mr. Victor has served both as Executive Vice President, International Projects, and Executive Vice President and General Counsel, Legal and Business Affairs for Sesame Street. He concluded transactions involving the launch of PBS KidsSprout, the purchase of the Sesame Street Muppets from The Jim Henson Company, and the formation and launch of Noggin, a joint venture between Sesame Workshop and Nickelodeon.

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By investing in promising Jewish education grant initiatives, the Jim Joseph Foundation seeks to foster compelling, effective Jewish learning experiences for young Jews in the United States. Established in 2006, the Jim Joseph Foundation has awarded more than \$450 million in grants to engage, educate, and inspire young Jewish minds to discover the joy of living vibrant Jewish lives.

jimjosephfoundation.org

The William Davidson Foundation is a private, family foundation, established in 2005, that honors its founder and continues his lifelong commitment to philanthropy, advancing for future generations the economic, cultural and civic vitality of Southeast Michigan, the State of Israel and the Jewish community.

williamdavidson.org

Dear Colleague,

Last year, our Foundations set out to answer some admittedly big questions: What is digital Lengagement? How are new developments in technology, with their rapid advancements and influence on interactions around the world, affecting education—and Jewish education in particular? How might funders develop the expertise to invest strategically in new tools, and in the people developing those tools, to advance our Jewish educational missions?

Both the Jim Joseph Foundation and William Davidson Foundation knew that these questions had no simple answers. And we knew there was much in this space about which we simply did not know. Thus, as we decided to co-invest in research about educational technology and digital engagement, we sought to keep our minds open to new ideas and were eager to learn from the experts.

The report you now have—Smart Money: Recommendations for an Educational Technology and Digital Engagement Investment Strategy—compiled by Lewis J. Bernstein and Associates, is the result of that co-investment. It includes a provocative set of recommendations for our foundations to consider and an illuminating landscape analysis of the educational technology field. We initially commissioned this report for our foundations' internal purposes, without explicit plans to share it widely. However, after reviewing it, we understood that the learnings here are highly relevant to others in the field: funders, practitioners, community leaders, and anyone interested in how tools of educational technology and digital engagement could advance cultural and religious learning and engagement.

Because of the report's substance, we have a desire and a responsibility to share it with you. We also believe it offers an important look into the process foundations undertake to explore a new space in which to consider developing an investment strategy.

We want to thank the members of the research team: Dr. Michael Levine, Dr. Michael Cohen, Dan Victor, and Shira Ackerman. They brought exceptional expertise and intention to this research, compiling material that ultimately benefits us all. We hope their findings and recommendations inspire you to consider dedicating time and resources to learn more and experiment with ideas in this space.

Finally, thank you for your interest in this material and for contributions you will make to the important conversations about educational technology and digital engagement in Jewish learning. To that end, we look forward to opportunities to collaborate around shared interests as we leverage educational technology and digital engagement to advance, to increase accessibility, and to continually innovate Jewish education.

Darin McKeever

Barry Finestone

President and CEO
Jim Joseph Foundation

Chief Program and Strategy Officer William Davidson Foundation

Preface: The Jim Joseph and William Davidson Foundations have been working diligently over many years on the demanding and pressing issues of Jewish engagement and learning. It is universally accepted that digital media engage youth and adults and can deliver educational outcomes. Yet the Jewish community can do much more to harness these powerful, ubiquitous, engaging Ed Tech tools efficiently in the service of Jewish engagement and learning. Lewis J. Bernstein and Associates present the following report advising the Foundations on making strategic Investments in Ed Tech and Digital Engagement in service of their missions. Educational technology (Ed Tech) is broadly defined to include: digital technology, internet connectivity, and digital content in the service of a full range of educational and learning objectives. It is designed for use by teacher/instructors, educational institutions, and student/learners.

This report is a result of months of Ed Tech audits, over fifty interviews, and the Principles' collective experience in the field. This report is presented in two sections:

- 1 a set of Recommendations for the foundations to consider and
- 2 a Landscape Report of the trends and tools used in Ed Tech.



1 Recommendations





•he recommendations below are organized to help the Foundations. best consider possible investments in Ed Tech strategically and tactically. They begin with "Basic Prerequisite Principles" every Ed Tech project needs to incorporate into its planning prior to investing. These principles include an articulation of the educational goals and target audiences that Ed Tech can serve and an understanding of the benefits and limitations of Ed Tech and the risks and rewards involved. Next, it is recommended that the Foundations explore increasing internal capacity and/or creating an adjunct Board of Advisors of Ed Tech experts, followed by the creation of a pipeline of research and knowledge to inform ongoing (long- and short-term) decision-making. Some "Best Bet Strategies" are then offered to diversify a strategy of investing and to maximize the potential for impact as follows: create a mechanism to support the best of the Jewish Ed Tech entrepreneurs to collaborate and create; explore potential partners and collaborators in the general Ed Tech world; invest—in a limited way—in the dynamic world of pooled Ed Tech investments; commission some big Jewish learning and engagement projects with leaders in the general Ed Tech space; and invest in innovation through incubators, competitions, and the support of young imaginative Ed Tech entrepreneurs. The Recommendations section concludes with some final thoughts for the Foundations to actualize their entry into the field.

one

Basic Prerequisite Principles

Understand the Powers and Limitations of Ed Tech

Before beginning, it is helpful to review the risks and rewards that the Ed Tech world offers.

Powers/Pluses:

- Reach and Scale: Ed Tech can amortize costs across large numbers.
- Ubiquity, Access and Availability: Ed Tech can enter schools, homes and anywhere in between.
- Speedy Diffusion: The best teachers, youth leaders, and mentors can reach out with the best content widely and instantaneously.
- Emotional and Intellectual Engagement: Ed Tech can engage with narratives to stir the heart and soul, while also teaching skills and knowledge. It can integrate joy and learning and serve as a "window to the world." And it can empower self-learning.
- Connections and Community: Ed Tech can be used to build communities of end users who share connectivity and resources.

Limitations/Minuses:

- Expensive: Ed Tech can cost millions of dollars to produce and still be unsuccessful at meeting the desired goals.
- Crowded and Competitive Marketplace: The best of materials can easily get lost.
- Distribution Challenge: Once something of quality is created, it has to be successfully distributed or it will not be used.
- The Jewish Marketplace: There is a limited number of potential consumers; production funding depends on grants, not a profit model; Ed Tech for Jewish learning is not seen as an attractive, sustainable profession; within formal Jewish educational settings, there often is a lack of tech skills and knowledge and a dearth of material/content for both Jewish and secular learning.
- Competition and Quality: Jewish Ed Tech must compete with both the entertainment and educational values in the general world—and quality is all too rare in the Jewish world.
- Misplaced Focus on the "tech" and not the "material/content."



"You can write a good book, even an excellent quality book, but can you just put it in the library? That's like the lottery; it won't be read. You need to think equally about distribution as well as the quality of what you produce." BJÖRN JEFFERY, TOCA BOCA

Define Clear Education and Target Audience Goals for Ed Tech to Serve

Ed Tech is most successfully used in the service of defined goals and audiences. Identify specific educational goals, skills, audiences, topics, environments, and outcomes one wants to affect and then decide the most effective Ed Tech to use. This is a role for the Foundation leadership and Board to play.

Mission Goals: The Foundations should consider allocating their Ed Tech funds across three mission domains:

- Engagement: We cannot teach those we cannot reach. The vast majority of Jewish children and young adults remain outside the tent of Jewish communal living and learning, but there is a unique opportunity to reach this audience digitally. Allocate 40 percent of the funds the Foundations want to invest in Ed Tech in Engagement strategies and projects to attract new audiences, raise awareness, stimulate identity, and provide gateway opportunities for deep learning especially to those outside the formal educational framework.
- Deep Learning: "Reaching" without "teaching" accomplishes little. Ed Tech has the unique ability to tell master stories, the Jewish narrative and traditions, the stories of our history and celebrations, as well as the power to teach skills and knowledge, empowering self-learning experiences, and putting the individual in the driver seat. Allocate 40 percent of the funds the Foundations want to invest in Ed Tech to Deep Learning, including formal and informal learning, virtual and in person, with materials and training for teachers, parents, and mentors, connecting remote individuals, schools, and communities.
- Community Building and Social Activism: Ed Tech can provide opportunities to blend real and virtual communities, social interactions and activism, within the Jewish community and outside in the larger general community. Allocate 20 percent of the funds the Foundations dedicate to Ed Tech to expanding digital opportunities for community building and social interactions, e.g., for young adults pre and post Birthright, for Hillel students, for tweens and teens returning from summer camp, for parents who want to participate in DIY tikkun olam projects with other like-minded Jews and non-Jews alike.

Target Audience Goals: Select Target Audiences by age, by content, by relevance, and by need. Ed Tech has special appeal and potential with children and young families, with bar and bat mitzvah aged youth, with young adults, all fitting the Foundations' from "cradle to college to cradle" age focus. Ed Tech's strengths range across content appropriate to Jewish learning—from the master stories of the Jewish people to values, skills, and knowledge. Focus on what is relevant to audiences—like holidays and the life cycle events commonly celebrated. Finally, focus on what are identified audience needs.

3 Define Parameters for Investing

It is essential to have an idea of how much the Foundations each want to invest in Ed Tech in the service of Jewish engagement and learning at the outset and in collaboration with others. As a next step, analyze available capital to invest in this domain, and know what others in Jewish philanthropy are spending on Ed Tech and are thinking about spending in the future. The analysis should consider a minimum of five years of support, the time necessary for any funders entering this area to really get a sense of impact and possibility.

<u>two</u>

Structural Recommendations

1 Internal Structure: Staff up and Build an Advisory Board

The dynamic nature of the Ed Tech field requires ongoing input to keep up, manage, and stay ahead of change.¹ Most Foundations are not sufficiently staffed to keep current with Ed Tech developments and to evaluate a large number of potential investment opportunities. Even representatives of larger foundations such as Gates and Dell made these observations about their organizations' own capacity limitations in this regard.

"I think the stuff has to be richer than anything else they are going to pick up."

Shmuly Yanklowitz, Valley Beit Midrash

"We focused on the device and ignored the content. It's been a \$1 billion train wreck."

Senior Executive, Amplify, The Education Division of Newscorp

"Ed Tech is a tool, not an end."

Daniel Septimus, Sefaria

¹ Technology has evolved at an extraordinary rate and many devices have either failed to capture the market's imagination and/or have become obsolete quickly. Based on analysis of five years of industry data from Amplify, Google, Microsoft, EdSurge, and other sources conducted by the Michael Cohen Group, concluding in November 2016, it is estimated that hundreds of billions of dollars have been lost in technology/device investments. Evidence indicates that the pace of technological innovation will continue unabated.

Options to consider include:

Create a New Full-Time Staff Position: Managing strategic investments in Ed Tech will demand full-time effort, as the recommendations below indicate. Each of the Foundations should consider hiring a Director of Ed Tech and Digital Engagement, with the possibility of an additional junior executive and administrative support as the portfolio of work expands. Qualifications for this role might include Ed Tech experience in all or some of the following: producing, creating, marketing, distributing, receiving, or dispensing grants. This professional should also have knowledge, interest, and experience in Jewish learning and/or community building. Such a Director of Ed Tech and team would have as key accountabilities:

- Leading the adaptation of the Foundation's mission goals into Ed Tech strategic investments
- Coordinating and aligning with Foundation Staff and Board internally and with external others (e.g., other foundations, grantees, liaison to investment funds)
- Coordinating the selection of advisors, as well as the subsequent agenda and schedule of an Ed Tech adjunct Advisory Board (described below)
- Coordinating efforts to partner with outside organizations in the United States and/or Israel for development of new Ed Tech offerings
- Serving as the primary liaison with all funded incubator/accelerator programs
- Coordinating with outside organizations to conduct competitive requests for proposals
- Establishing and managing a streamlined process for Ed Tech grants
- Serving as the primary liaison to pooled investment funds
- Overseeing the organization and administration of conferences and convenings



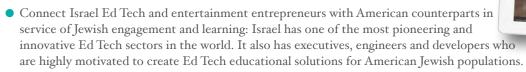
"The first investment I would make—not forever—but first, is bringing together the best people doing Ed Tech in the Jewish world and outside the Jewish world in some framework that would be ongoing, for three retreats or more, to really give them an opportunity in a structured way to map out some of the things they think they can do, to look for partnerships, and to audition advisors you might want to continue with." JONATHAN WOOCHER, LIPPMAN KANFER FOUNDATION FOR LIVING TORAH

Establish an Ed Tech Adjunct Advisory Board to keep up with and interpret Ed Tech trends, provide up-to-date intelligence on what is happening in the Ed Tech field, and discuss, advise, and guide the direction of the Foundations' Jewish education goals in this space. The role of the board would be to:

- Advise on issuance of requests for proposals and investment ideas based on the Jewish Ed and Engagement Goals of the Foundations;
- Bring to the attention of the Foundations cutting-edge developments, companies, organizations, and individuals who could serve as potential partners in developing Ed Tech offerings relevant to the Foundations' missions;
- Share expertise and current industry information and make introductions to promising companies and organizations;
- Meet with Foundations' Staff and Board on an as-needed basis.

Selecting Advisors:

Organize a series of seminars bringing top thinkers and doers in the general and Jewish Ed
Tech worlds to offer their investment and programmatic suggestions, and select the best
among them to serve on the Adjunct Advisory Board.



- The Ed Tech Adjunct Advisory Board members should consist of a mix of four to five individuals from the following illustrative categories: Jewish educator, general Ed Tech producer/game producer, general Ed Tech investor, Jewish Ed Tech producer, entertainment producer, new tech/design maven, business/marketing/toy creation executive.
- Directors of Ed Tech and Digital Engagement and the Ed Tech Adjunct Board, together with Foundation staff guidance, will review the consultants' recommendations and identify first ideas for action and research.

Invest in Periodic Convenings and Annual Conferences

- The Foundations should periodically sponsor convenings to stimulate ideas and to identify the most pressing educational needs of the American Jewish community, as well as the ones that Ed Tech is best positioned to address most effectively and efficiently. The convenings should be multi-sector—a combination of Jewish and general educators, Ed Tech innovators, Jewish-led VC executives, accelerator and incubator leaders—and segmented by demographic focus and distinguished by affiliation. Convenings can be jointly sponsored with other similarly interested foundations.
- The Foundations' Directors of Ed Tech should consider attending (and when ready, organizing) sessions at conferences like these: NY EdTech Week; Arizona State University—Global Silicon Valley (ASU-GSV) summit; NewSchools Venture Fund Summit; K12 Philanthropy Forum; Education Technology Industry Network (ETIN) Conference; International Association for K-12 Online Learning (iNACOL); International Society for Technology in Education (ISTE); IBM InterConnect; Code/Media; South by Southwest (SXSW); Google Next; Microsoft Worldwide Partner Conference (WPC); Dreamforce; Adobe Summit; Digital Life and Design; Israel Ed Tech conference; Further Future.

13 Invest in Research and Prototyping

Implementing an Ed Tech strategy demands data analysis, a combination of basic and formative research, accompanying prototype development and pilot testing. To mitigate one set of the risks inherent in investing in Ed Tech—not getting the educational messaging right—it is recommended that (except for some experimental innovation grants) the Foundations apply their standard practices of requiring that the development plans of Ed Tech grantees include setting educational goals and measureable outcomes, and identifying the evidence that will be used to determine educational effectiveness, specifically in terms of reach; repeat use; depth of Jewish learning: knowledge, and attitudes, and behaviors.

The following forms of research are recommended:

- Basic and Applied Research: The more that is known about how Jewish children, families, and young adults use Ed Tech in general, and Jewish Ed Tech in particular, the better the Foundations can build upon a knowledge base to develop effective Ed Tech engagement and learning strategies into the future. This is a "Field building" endeavor and ripe for cross-Foundation collaboration. The Foundations can assume a leadership role in funding basic use and gratification research.
- Formative Research: Fast-paced rapid prototyping, with users generating data, is the mark of Ed Tech. This provides necessary feedback to production teams to inform and improve product development. It can help to ensure that learners are responding appropriately to design elements such as user interfaces, visual cues, programmed feedback, clarity of educational messaging; appeal of characters; and the appropriate integration of entertainment and education elements.



Nicky Newfield, Jewish Interactive

Jewish Interactive

"We don't understand how families and anyone use tech to supplement their Jewish lives. . . from calendars and going to Chabad.org to seeing when Shabbat starts. . ."

Ari Kelman, Stanford University

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Best Bet Investing Strategies

"There are at least a dozen organizations that are doing things that are truly compelling. How can we all work together to raise the bar to make it better and more exciting? A major partnership grant would help."

David Katznelson, Reboot

1 Invest in Collaborations Among the Best of Existing Jewish Ed Tech Producers

Form an umbrella of the best of the Jewish Ed Tech organizations to jointly explore ideas and together respond to directed invitations from the Foundations. This can be done under the facilitation of a General Ed Tech advisor together with a top Jewish educational consultant. Giving those who have successfully dedicated themselves to this field a chance to be creative, collaborative, and competitive will support the beginning of a "mini-salon" of Jewish Ed Tech thinkers and creators and help seed a Jewish Ed Tech ecosystem where great products can be created and joint scalable marketing and distribution can be planned. This is an endeavor that the Foundations can lead and join with other like-minded foundations that have expressed similar interests.

Partner with Companies and Organizations Already Active in the Ed Tech Space

Most foundations are neither adequately equipped to assess nor make savvy Ed Tech investments on their own. In addition to hiring an in-house Ed Tech Director and creating an Adjunct Ed Tech Advisory Board, the Foundations should consider partnering strategically with companies and organizations already active in the Ed Tech space. Partners can help determine investment decisions; organize, promote, and administer competitions, requests for proposals, and grant submissions; and manage time-consuming projects. Consider partnering and investing in an accelerator, one like MindCET² in Israel or others in the United States, to identify and subsidize Ed Tech companies in development that could be valuable to Jewish education.

- The creation and operation of incubators and accelerators based on the mission and goals of
 the Foundations are well beyond the internal resources of the Foundations. Incubators and
 accelerators require tech-friendly facilities; advisors with expertise in education, technology,
 and business and finance; and back-office administration and support.
- Stimulate innovation in the field of Jewish Ed Tech by sponsoring competitive requests for proposals and design grant competitions to solicit submissions from a wide range of participants. Large foundations such as Gates and Dell, and the White House Office of Science and Technology Policy, U.S. Department of Health and Human Services, U.S. Department of Education, and the National Science Foundation have all partnered with outside vendors to manage high-profile initiatives and do not attempt to manage these competitive outreach efforts themselves.

1 Invest Limited Funds in Pooled Ed Tech Investment Funds

Consider a *limited* investment in pooled investment funds run by organizations such as Reach Capital, Collaborative Fund, or the New Schools Venture Fund. Such investments would forge relationships with innovative Ed Tech companies, as well as provide the following critical information: what's new and emerging in the general Ed Tech world; what companies are emerging or breaking out with truly impactful and innovative educational products or services; and what new Ed Tech products and services are proving themselves in the marketplace that could be adopted potentially for Jewish learning. Even large, well-staffed foundations like Gates have aligned with mission-compatible investment funds to keep abreast of latest developments in the field, to scout out emerging innovations, and to identify grant- or investment-worthy companies or organizations.

² MindCET, a non-profit based in Israel, runs a number of Ed Tech accelerator programs, has 11 full-time employees and 30 to 40 freelancers with specific areas of expertise: finance, tech, education, business planning, etc. It supports about 10 for-profit startups, plus teacher entrepreneur programs. It grew out of CET, the Center for Education Technology in Israel, an institution founded by the Rothschild Foundation, to invest in education in general in Israel and in Jewish education as well. The Foundations' funding to a MindCET or others could be focused on spurring development of Ed Tech solutions to meet the distinct challenges facing American Jewry.

The number of Ed Tech investment entities that are likely to provide mission priorities sufficiently compatible with the Foundations' priorities for a pooled investment fund is fairly limited. The Foundations should first identify the amount of funding they intend to make available for this purpose and the types of companies and projects in the general Ed Tech space that they would find of greatest interest. Once the investment threshold and priorities are identified, make inquiries directly with these companies as to whether they are interested in setting up a pooled investment fund consistent with those priorities.

It is recommended that investment in pooled funds be limited. Supporting these secular pooled Ed Tech funds will not directly impact engagement in Jewish life and learning. However, the Foundations' involvement in these funds will provide valuable knowledge and networking that will benefit their Ed Tech strategies. Board participation in these emerging companies is more about information gathering and less about governance. The Foundations' Directors of Ed Tech, as opposed to Board Directors, should fill these board seats.

4 Track and Commission Ed Tech Products That Emerge from the General Ed Tech Space for the Jewish Audience

Build on the above recommendation and identify promising General Ed Tech offerings that may be suitable for adaptation to the educational needs of the Jewish community, and then seek to commission a specific customization of the offering to the mission goals of the Foundations. Some examples: Glatt Charitable Trust commissioned Tiny Taps to create JI Tap; The AVI CHAI Foundation funded the secular non-profit New Teacher Center to launch the Jewish New Teacher Project. The Foundations need to be aware that general Ed Tech companies have their own company missions, which are not limited to the small Jewish education marketplace. They will need to be incentivized with sufficient funds to cover their overhead, costs, and profit.

"We are a Jewish division in a secular larger non-profit, the New Teacher Center, that services public schools. We are separate from them in terms of funding; all of our content is theirs that they field test and then we adapt to our Jewish day school clientele." NINA BRUDER, JEWISH NEW TEACHER PROJECT



6 Invest Significant Grants in Developing New Content Using "Big/Proven Talent" and General Ed Tech Companies

Commission the best talent to write, produce, and distribute the master narratives of the Jewish people. Classic Jewish narratives can serve as gateway projects for those on the margins to engage in and explore Jewish life and learning, or at least minimally to connect to their Jewishness. When using this model, the Foundations should amortize knowledge to build the field (e.g., by placing Jewish educators and young talent to-be-discovered to work within) and guarantee open education resource access to the materials. Identifying and recruiting "big/proven talent" will develop over time through Board contacts, through the adjunct Ed Tech Advisory Board, and through exploring approaches like these:

³ See, for example, the following websites devoted to monitoring and reporting on Ed Tech investment activity. (https://ssir.org/articles/entry/new_approaches_to_ed_tech_funding; https://www.cbinsights.com/blog/ed-tech-most-active-investor-infographic/).

- Feature Films on a relevant Jewish topic. For example, Participant Media, together with the BBC, commissioned David Hare to write the screenplay to *Denial*, which they produced.⁴
- A Netflix or Amazon Prime video series on a topic, personality, or period in Jewish history and culture, planned in advance with book clubs, and a social media component to create an educational eco-system.
- An immersive Jewish history video game using Jewish historical content with game formatting designed by the best game producers.

6 Invest with Smaller Innovation Grants and in Field Building

Nurture innovation with smaller grants to talented innovators, through requests for proposals and competitions to help build the field of Ed Tech for Jewish learning.

- Create a "fast-track" application process for small-scale "Innovation Grants," like the Y-Combinator model. These would be grants for amounts of money that do not constitute significant commitments (say \$30,000-\$50,000). The grants would be designed to assist young entrepreneurs and companies to respond to the requests for proposals and pitch Ed Tech ideas that have the potential to pioneer new approaches to Jewish education consistent with the Foundations' missions. Follow-up grants for more substantial sums of moneys would require more extensive applications and due diligence. Modify the grant application process to accommodate the fast-paced, experimental world of tech. Support young Jews throughout the country going to engineering, computing, film and graphic design schools, and encourage them to produce ideas in response to requests for proposals to form a cadre of talent to engage in Ed Tech challenges for Jewish learning.
- Support through contests, challenges, and hackathons, consumers of media—the "go-pro" generation—to produce media to the specs of the Foundations.
- Encourage existing grantees who are working in more traditional spaces using more
 conventional platforms to apply for innovation grants to utilize Ed Tech tools to deepen the
 impact and/or extend the reach of their existing programs and to respond to new requests
 from the Foundations.

Invest in Crossover Opportunities

Explore crossover collaborations: Jewish living and learning do not occur just within a ghetto and are not separate from some of the same concerns that others share in the secular world. Foundations should invest in universal projects reflecting Jewish educational values to blend secular and Judaic educational content as well as to attract Jews who would not necessarily self-select to Jewish learning materials, sites, or platforms, like: building "Middot" or a character as was done with Tiffany Shlain's Character Day work and "The Making of a Mensch." ⁵

8 Invest in Infrastructure

The Foundations, in collaboration with other funders, should map and explore supporting the back-end Ed Tech needs for staff, for equipment, for upgrades, for data management, for personalizing and tracking learning, for training, and for better implementation in Jewish institutions ranging across schools, agencies, and other institutions of Jewish learning. This maintenance and upgrade work, although not as cutting-edge and exciting, is necessary for field building.

⁴ See https://www.youtube.com/watch?v=Gfyw7Uz8 2A

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Final Thoughts on the Recommendations

Ed Tech and Digital Engagement are powerful tools for the Foundations' missions to engage audiences—both those on the margins of Jewish life and those deeply immersed—to deliver deep, meaningful learning experiences, and to provide for community building and social cohesion. These tools can be expensive and entail risk taking, but have tremendous reward potential as well to reach, engage, and teach the target audiences the Foundations have identified: from "cradle to college to cradle." The Jim Joseph and William Davidson Foundations will need patience and will need to experiment. There will be opportunities to collaborate on specific projects with partners, but the Foundations should also be prepared to go at it alone. This space is rich with opportunities to advance Jewish educational objectives and is ready for major funders to step in and provide thoughtful leadership.

"We want Jewish global citizens. We want students to know how their heritage is relevant in the real world. We need whole person learning, in school and out, Jewish and secular, combined. We want kids to learn how to code, how to create in both the Jewish and secular space." TIKVAH WIENER, I.D.E.A. SCHOOLS NETWORK





 $^{^{5} \ \}textit{See http://www.letitripple.org/character-day/ and http://www.letitripple.org/films/making-of-a-mensch/letitr$

"The question of Ed Tech is first and foremost use and influences . . . applying that to Jewish ed."

Ari Kelman, Stanford University



Educational TechnologyLandscape





his landscape report aims to provide a summary of the trends and important tools in educational technology that need to be considered by the Foundations as their investment strategies are developed for Ed Tech and Jewish learning.

This section presents various categories of educational technologies; descriptions and examples of each; relevant Jewish educational tools; and suggestions for further exploration of the different types of technologies and tools.

The presented technologies were selected due to their popularity and wide reach, and for their potential to be used in a variety of educational settings for a variety of audiences. The technologies can often be applied to both formal (in school) and informal (outside of school) learning. Many are curricular and school-based and many are more informal but have great potential for learning, engagement, and community building. In addition, many of the technologies can be adapted for a variety of different ages. Finally, it is important to note that the examples provided below are just that. They are illustrative and not intended to reflect all of the existing technologies within a category.⁶

⁶ In addition to the technologies listed below, it is also important to note Blended Learning and Flipped learning, teaching methods often used in the implementation of educational technology and which make use of many of the tools and resources discussed below. Blended Learning integrates learning programs or apps with traditional teaching methods. Flipped Learning occurs when teachers give homework that includes lectures or instruction online and use classroom time to help students apply learning gained via the homework.



One New Models for Learning: Personalized/Adaptive Learning and Big Data and Analytics; Distance Learning and Virtual Classrooms

two Interactive Instructional Tools: Creative Tools; Game-Based Learning; Augmented Reality/Virtual Reality; Coding & Tech-Related Skills

three Digital Content and Portals: Curricular Databases and Websites; General Educational Websites and Resources; Subscription Services

four Relationship and Community-Building Resources: Social Media and Community and Lifestyle Websites; Video Conferencing and Video "Meet-Ups"

Support for Organizations and Educators: Support for Technology Infrastructure; Professional Development

New Models for Learning

Personalized/Adaptive Learning and Big Data and Analytics

Personalized and adaptive learning use big data and analytics to continuously adapt or individualize a learning path, providing performance feedback to the learner and reports and monitoring abilities to teachers. Unique learning experiences are provided, and content can be delivered based on responses, wants, and/or skill sets. The data and analytics provided enable teachers to track students' learning, understand effective learning and teaching techniques, and customize students' learning. In addition, there are other forms of newer, emerging technologies that can also be categorized as personalized learning, in that they provide customized and user-determined learning. These include the Internet of Things, physical objects "embedded with electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data," and chatbots, "software that allows for a conversational or messaging style interface that simulates a human interaction." The idea of using chatbots as teachers, guides, and tutors is currently emerging in education.

Examples

- Knewton: Online platform focused on adaptive learning and analytics. www.knewton.com
- DreamBox: Mathematics software presented as animated adventures, games, and challenges.
 www.dreambox.com
- Curious.com: Users can select 5, 15, or 30 minute daily courses to learn a new skill or knowledge on a topic. www.curious.com
- Smart Toy® Bear: Uses voice and image recognition to interact with user and present personalized activities. http://fisher-price.mattel.com/shop/en-us/fp/smart-toy/smart-toy-bear-dnv31
- Duolingo Bots: App focused on language learning via conversations with artificial intelligence bots. http://bots.duolingo.com

⁷ https://en.wikipedia.org/wiki/Internet_of_things

⁸ http://venturebeat.com/2016/09/29/how-chatbots-will-help-education/

Distance Learning and Virtual Classrooms

This model provides access to courses or educational experiences online, enabling learners to access content and top-level instructors they may not have had access to otherwise, as well as communicate with students in other locations. There are two types of distance learning: synchronous, where students primarily access courses and communicate with each other and the instructor in real time; and asynchronous, where instructors manage online courses and present curriculum, lectures, and lessons that students access at different times (sometimes referred to as MOOCs: massive open online courses).

Examples

- Coursera: A MOOC engine partnered with well-known universities that offers courses, taught via video lectures, text lectures, and discussions. www.coursera.org
- **Big History Project:** Online social studies course for middle school and high school that spans the course of time. Provides professional development, full lessons, and year-long curricula for teachers. Supported by Bill Gates. http://school.bighistoryproject.com
- **Peloton:** Peloton branded stationary bikes are used to access both live or on-demand spin classes, thereby offering opportunities for synchronous and asynchronous learning, as well as personal interactions and community building at the physical locations. www.pelotoncycle.com
- Jam.com: Online video courses for kids ages 8-14 ranging in non-curricular topics from cooking to becoming a pop star. Courses are based on quests, challenges, and activities for the learner to complete. www.jam.com

Related Jewish Tools

- Lookstein Virtual Jewish Academy: An online school of Jewish courses.
 www.virtualjewishacademy.org
- Shalom Learning: Personalized religious and Hebrew courses for at home or in schools.
 www.shalomlearning.org
- Bonim B'Yachad: Collaborates with Jewish day schools to create personalized online courses.
 www.bonimbyachad.com
- OnlineJewishLearning: Offers various online courses including a Hebrew school at Home program; Bar/Bat Mitzvah preparation, a Hebrew reading program and Adult Education.
 www.onlinejewishlearning.com
- Gratz/Jolt: Online Jewish courses for teens (college credit can be earned). www.gratz.edu/jolt
- The Virtual High School, Online Judaic Studies Consortium: Online Jewish courses for use in schools with 8-12th graders, completed under the guidance of a trained teacher at the school. www.thevirtualhighschool.org/OJSC
- CollegeNow: Online Jewish studies university courses for high school (credit can be earned).
 www.yu.edu/college-now/
- JETS/Land of Israel Online: Online Jewish and Israel related courses for teens and adults that include virtual visits to sites in Israel. www.landofisrael.online
- ITaLAM9: Digital version of the Hebrew teaching TalAm curriculum, currently in development and being piloted for 2nd grade. Includes both digital and non-digital products, which use videos, games, stories, assessments, and personalized educational activities.

 www.youtube.com/watch?v=t8MaHu8l4Cw
- Medabrim: Comic-based Hebrew language lessons for conversational Hebrew that include online lessons and activities. www.medabrim.com/en/links
- 8-Minute Message: Automated daily message of Jewish inspiration. www.8minutemessage.com

⁹ Compedia and ITaLAM formed a partnership in the development of this.



- **2-Line Torah:** Weekly two-line message about the weekly Torah portion. www.hillel.org/jewish/jewish-education/two-line-torah
- Mechon Hadar Project Zug: Users select an online course and are then paired with a havruta with whom they can learn via video chat and use the provided online resources. www.projectzug.org
- eTeacher Hebrew: An online Hebrew course with a weekly virtual component taught via video conferencing. Can be done in small groups or one-on-one. www.eteacherhebrew.com
- Azrieli Graduate School of Jewish Education and Administration Online Master's Program: Student-paced online Master's program for students who live more than 50 miles from YU. http://www.yu.edu/azrieli/prospective-students/masters-programs/
- **Hebrew Union College:** A variety of offerings of part-time online programs that combine on-site and distance learning. http://huc.edu/academics/elearning
- Hebrew College Masters of Arts in Jewish Studies: An online master's program that uses both
 asynchronous and synchronous learning as well as video chatting and havruta learning.
 http://www.hebrewcollege.edu/online-learning
- Israel Institute: Worked in partnership with a number of leading Israeli universities to launch two MOOCs on the topics of Israel's history, politics, and society. http://israelinstitute.org/

Further Suggestions for Jewish Education

- Invest in the creation and support of an immersive Blended Virtual/Real Jewish Day school, with both secular and Jewish studies, taking the best from what exists in day schools and secular learning. Optional in-person mentoring and a social/communal meeting component, as well as teacher training could be included.
- Use online courses as a way to build community, connect, and teach before, after, and during the off-season for programs such as Birthright Israel and camp. Perhaps counselors could lead or TA such courses and earn credit or a salary for this work.



"Make a Jewish Khan-like academy portal with highquality video and other resources. And make sure you have sufficient funds to support its distribution."

BJÖRN JEFFERY, TOCA BOCA

- Partner with general Ed Tech companies like Coursera and AltSchool to create courses and material. Both of these organizations have and are currently pursuing partnerships with nonprofit organizations, including the Museum of Modern Art and the Museum of Natural History in New York City. AltSchool recently announced partnerships with various schools, one being Temple Beth Sholom Day School in Miami Beach.¹⁰ At the end of November 2016, Coursera will offer a course in partnership with the Hebrew University entitled "Israel State and Society." ¹¹
- Consider the Peloton model which offers both synchronous and asynchronous distance learning as well as opportunities for in-person connections and interactions. Explore this combined model, which provides opportunities for learning and community building, for families with young children or college-age students. Perhaps build on already existing physical institutions such as JCCs, which due to their offerings (e.g., recreation, fitness centers, and preschools) already have audiences from a variety of backgrounds.

¹⁰ http://blog.altschool.com/next-phase-altschool-mission

¹¹ https://www.coursera.org/learn/israel

- Currently big data is used mainly to track student progress; however, there are other ways big data
 and analytics can be used for Jewish education through tracking and content delivery.
- The automated delivery of short yet meaningful content, similar to that of 2-Line Torah, 8-Minute Message, and Curious.com, seems like a worthwhile model to build on, especially if it were personalized and users had a say in the content and frequency of the content. For example, someone could receive a 2-minute video every Jewish holiday, whereas another person could receive a daily audio excerpt from Pirkei Avot.
- Utilize big data to deliver to people more personalized and relevant content based on previously chosen content from within their sites. For example, if a person reads an article about bar mitzvah on a site, that site or a partner site can send her relevant content in all forms (e.g., videos, books, social media communities, and articles).

two

Interactive Instructional Tools

Creative Tools

Through the use of various interactive digital tools, learners create and express what they learn, their stories and themselves. This constructivist approach to learning (and teaching), and the emphasis on user-generated content, often builds on students' interests and utilizes tools and apps students comfortably use and enjoy in their own lives outside of school. These tools can be used collaboratively or individually and can enable user-generated content to become tools for engagement and informal education, as people share their end products in person and on social media. Teachers also use these tools to present material and lessons in engaging ways. Projects created might include films and short videos, photo collages, songs/music, blogs, websites, and 3D-printed or laser cut objects.

Examples

- iMovie: A movie making app. www.apple.com/mac/imovie/
- Musical.ly: A music video making app. http://musical.ly/
- Powtoon: An animated video presentation tool. www.powtoon.com
- Recap: A student video response and reflection app. www.letsrecap.com
- 3D Printers: Successive layers of material are formed via computer control to create an object. http://en.wikipedia.org/wiki/3D_printing or www.tinkercad.com

Related Jewish Tools

- "All of the Above": Builds on people of all ages' desires to create and share user-generated content. "All of the Above" programs can be and are currently used in many Jewish educational settings to create Jewishly themed content. For example, the student-made video, "I Am Not Orthodox:" www.youtube.com/watch?v=GPCDcF5IE_g
- New Media in Jewish Studies Collaborative: Under the guidance of professors, and through ongoing learning, college students use media tools to create Jewishly themed projects and presentations. http://newmediajewishstudies.org
- Haggadot.com: A tool that enables users to create their own Passover haggadot using provided resources including texts, videos, and artwork. http://www.haggadot.com/
- Jewish Impact Films: "A fellowship of young Jewish filmmakers, established in 2004 by leading Hollywood producers to empower young Jews to use creative media, specifically short internet-based films, to effectively communicate new messaging about Judaism and Israel." Note: This program has ended, and although the website says it will be restarted, there are currently no signs of this. www.jewishimpactfilms.com

"I am working on an entry management app [with] a virtual button on your phone that you use when you enter a Hillel... If we could couple that with some witty, fun [Jewish] content, and users were able to like and share it, we would have a real time focus group... And then we could license it to JCCs or other events... we could get a sense of where Jews are going."

Dan Smokler, Hillel International

"Organizations that have similar missions can work together to provide a more personalized experience. There's a way of knowing that I'm a mom of two boys—one with a bar mitzvah soon. If I look up "bar mitzvah," PJ Library can refer [young adult] books, BimBam can send videos... It can be a really deeply personalized experience. If we know someone comes in and says, 'How do I say the mourner's kaddish?' How do I give them additional content-30 days from now, a year from now, etc.—and not just an individual article?"

Rebecca Phillips, RevSquare

Further Suggestions for Jewish Education

- Create social media campaigns and competitions through which people can share and create their own material based on inspirational videos. For example, a "#WhyIAmAJew" or a more universal #WhyIAmA _____" campaign through which people create and post their own videos and work, as inspired by Rabbi Jonathan Sacks' video, "Why I am a Jew": www.youtube.com/watch?v=CAbiFbpQP80
- Explore the potential of sharing Jewishly themed music videos as is done with apps like Musical.ly
 for communities ranging from Jewish schools to bunkmates from Jewish camp during the off-season.

Game-Based Learning

Game-based learning integrates curriculum content into a game format. It is important to note the distinction between games intentionally created for the purpose of education and often with specific curricula in mind, and games originally intended for entertainment but often used to educate (and very often in educational settings), such as Minecraft. Games can be very powerful tools for learning. They encourage skills such as problem solving through self-directed exploration; they can be scaffolded to deliver "just-in-time learning;" and they can use data to help players understand their progress. This can all be accomplished through entertaining and engaging play, which additionally "gives players permission to take risks considered outlandish or impossible in 'real life.' There is something in play that activates the tenacity and persistence required for effective learning." 12

Examples

- Kahoot!: Customizable trivia game for group learning. www.getkahoot.com
- Minecraft: An open world game in which players build functioning "worlds," known to promote
 creativity, collaboration, and problem solving in an immersive environment.
 http://education.minecraft.net
- Tiny Taps: An app that enables teachers and students to create and share curricular-based games.
 www.tinytap.it/site/home
- Games for Change: A nonprofit organization that facilitates the creation and distribution of social impact games that serve as critical tools in humanitarian and educational efforts.
 www.gamesforchange.org
- Osmo: Learning games that combine apps with physical and drawn items. https://www.playosmo.com/en/

Related Jewish Tools

Many of the general education school-based programs can be used for Judaic studies. For example, Kahoot! and Quizlet have Hebrew language capabilities.

- Facing History and Ourselves Online Game for Social Change: This game occured in November 2016, with a goal "to engage educators, students, and the broader public to think about the choices we will be making ten years from today." The game was primarily on an online platform called Foresight Engine™, developed by Institute for the Future, a 48-year-old non-profit research organization, to engage large numbers of people in fast-paced sharing of ideas about the future. http://info.facinghistory.org/facethefuture
- Minecraft for Judaics: A guide for how Jewish educators can use Minecraft as teaching tool. www.jteach.org/project/minecraft-in-the-jewish-classroom/

¹² http://www.instituteofplay.org/about/context/why-games-learning/







- Jewish Interactive: A variety of games surrounding Jewish topics and holidays including JITap, a program modeled after Tiny Taps, which enables the creation of interactive games and lessons. www.jewishinteractive.org/products/
- Keren Hayesod Spanish Games: Online games related to Jewish content. www.kh-juego.com/
- Sparks of Eternity: Created in partnership with the Michigan State University Games for Entertainment and Learning (GEL) lab. This goal of this game is to help Rabban Yochanan ben Zakkai escape Jerusalem and arrange a secret meeting with Abba Sikra, the head of the *biryonim*, in order to escape the zealots. www.sparksofeternity.com
- Kerem B'Yavneh: A sequel to "Sparks of Eternity." In this game players must build a homestead living a fully Jewish life and sell the crops and produce in order to buy items to celebrate the festivals and contribute to the Yavneh community. Teachers can create their own quests for students, give quizzes, and provide rewards. http://jewishgaming.com/keby.html

Further Suggestions for Jewish Education

Explore the "gamification of doing good deeds." Create a game environment that integrates tikkun
olam and opportunities for real-life social action. These can be used year round or during the camp
off-season, as a competition between bunks or other groups, or even as part of a bar/bat mitzvah
chesed project.

"The gamification of...doing good deeds, where you're learning about the Jewish context while also doing... [Make it a] competition—bunk vs. bunk or camp vs. camp—with prizes and accolades during the summer... Introduce it in the camp season... Imagine a grand bar mitzvah activity."

AVI ORLOW, FOUNDATION FOR JEWISH CAMP



- Consider partnering with organizations like Games for Change to create similar programs including their hackathons and student challenges or to create games. www.gamesforchange.org/programs/
- Encourage and support the use of games that are already popular and played to integrate Jewish content. For example, building a sukkah or other examples provided in this Minecraft guide: www.jteach.org/project/minecraft-in-the-jewish-classroom/
- Further explore partnerships similar to the one between Jewish Interactive and Tiny Taps, through which general tech companies are hired to create Jewish content that is equal in quality to the secular content they produce.
- Further explore partnerships with university-based game labs to create and pilot games.
- Given the abundance of Jewish artifacts, combining physical objects with game-based apps like Osmo could be particularly beneficial especially for younger children.

Augmented Reality/Virtual Reality

It is commonly said that virtual and augmented reality enables people to "do the impossible," as they immerse themselves in experiences they couldn't otherwise have. Learners can "visit" places and time periods and interact with those environments. A recent development in virtual reality (VR) is a push toward using it to help people develop empathy and gain an understanding of others' perspectives. (See the example of

"A Walk Through Dementia" described below.) This use of VR seems rich with educational opportunity as it can truly put learners in someone else's shoes.

Text, images, and objects all come to life in 3-D form through augmented reality (AR), enabling learners to interact with them. Students can see and interact with things such as historical objects or scientific models. Some extraordinary examples are included in this video clip especially from time mark 1:04-1:29: https://www.youtube.com/watch?v=OvAh5ajfBq8.

Often AR is used with custom-made textbooks and paired with in-person interactions such as museum exhibits or outdoor locations. These in-person interactions use geolocation software to "superimpose virtual objects at precise GPS coordinates, enabling the user to see the objects integrated into the physical location as if they existed in the real world." ¹³

Examples

- Google Cardboard: Product and app pairing that enables virtual visits and experiences. http://vr.google.com/cardboard/
- A Walk Through Dementia: A VR app that "gives the viewer the chance to feel what it is like for a dementia sufferer to tackle various everyday tasks... from making a cup of tea, to shopping at the supermarket and walking home." www.awalkthroughdementia.org
- Compedia/Museum of the Bible Collaboration: Augmented reality implementation in textbooks and curricula, with interactive and personalized experiences for museum exhibits.
 www.compedia.net/success-stories/education/culture-andheritage-studies/
- American Museum of Natural History: Digital projects (some student created) involving in-person
 interactions, augmented reality, and other activities related to the museum exhibits.
 www.amnh.org/explore/news-blogs/education-posts/help-solve-the-riddle-of-neanderthaldisappearance/ or www.amnh.org/explore/ology/at-the-museum/dreams-of-the-haida-child
- Pokémon GO: An app-based game that uses geolocation and AR. Players find Pokémon characters
 in the live world around them. The game merges virtual and in person interactions as well as learning
 about sites, and geo-spatial skills. This seems like an extremely powerful tool for education.¹⁴
 www.pokemongo.com

Related Jewish Tools

- Mapping Ararat: An AR public art project constructed at the location where Mordecai Noah intended to found Ararat, "a city of refuge for the Jews" in Grand Island, New York in 1825. www.mappingararat.com/
- Jewish Time Jump: New York: An AR game/simulation and interactive story in the form of a situated documentary. "Working as a reporter for the Jewish Time Jump Gazette, the player is tasked by their Editor with travelling back through time, to Greenwich Village, New York of the early 1900s." www.converjent.org/jewish-time-jump-new-york_page/
- MindCET VR Apps: "I am the Other," "The Hallway," and "I Get the Other" are empathy building apps that aim to put users (e.g., middle school students) in social situations such as walking in a



school hallway and being shunned, to help them understand the perspectives of others. http://mindcetvr.strikingly.com/

¹³ www.mappingararat.com

¹⁴ Potential educational impact of Pokémon GO: http://www.edweek.org/ew/articles/2016/08/03/educators-weigh-learning-value-of-pokemon-go.html

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/

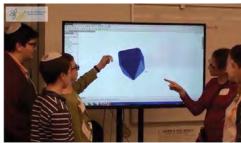
- iD Tech Camps: Summer tech programs for ages 7-17. https://www.idtech.com/tech-camps/
- Fisher Price Think & Learn Toys: A line of learning toys that use technologies including scanning and coding as part of the play and to teach.

 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 service¹⁷ 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.

"CIJE has broken down barriers you wouldn't expect with their engineering symposium: you had right-wing, same-sex schools, and Solomon Schechter all at the same symposium (kids, not educators). You tell me where else you will find this... It's because it's about coding [and] engineering, getting a job in [the] 21st century." TZVI PITTINSKY, THE FRISCH SCHOOL



- Create partnerships with Israeli tech companies and/or Israel21c for mentorship, exchange programs, or virtual courses or lessons and discussions about Israeli tech and the work of Israeli tech companies.
- Empower and appeal to young people's comfort with, knowledge of, and interest in technology.
 For example, create a mentoring partnership in which youth help older people (and/or younger children) with technology and the older people teach the youth something in return; e.g., have youth and the elderly create video diaries/interviews.
- Build on the idea of Jewish tech camps and after-school programs, appealing to children and parents' interests in these fields.

three

Digital Content and Portals

This category includes resources used by teachers to obtain educational content, lessons, assessments, projects and resources. It also includes sources used by students to obtain information and educational content and learn either in a formal learning environment or at home. The media presented greatly varies and ranges from text-heavy websites to videos and music. Some of the material is more curricular and correlated with specific skills, whereas others are more broad and can be used for learning about various topics both in school and at home.

Examples

Curricular Databases and Resources

- OpenEd: A K-12 educational resource library of lessons and activities. www.opened.com
- PowerMyLearning: Curriculum centered activities, and lessons for both teachers and students. www.powermylearning.org
- CK-12: A lesson and activity database that enables students and teachers to interact. www.ck12.org/

General Educational Websites and Resources

Many of these include games, activities, and lessons.

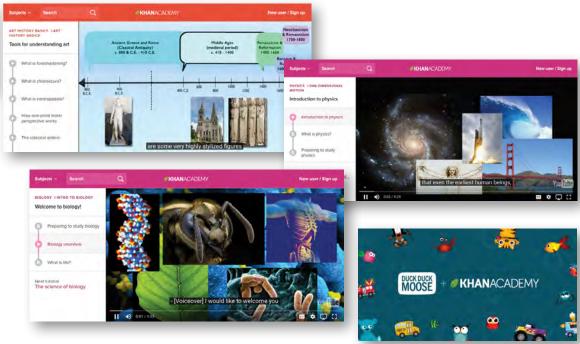
- NewsEla: Current events and news website that builds reading comprehension through leveled articles and assessments. www.newsela.com/about/
- Scholastic: A publishing, education and media company known for publishing, selling, and distributing books and educational materials for schools, teachers, parents, and children.
 www.scholastic.com/home/

- National Geographic Kids: Provides geography, history, and world culture resources for students, parents, and teachers. www.kids.nationalgeographic.com
- Membean: Provides guided, multimodal vocabulary instruction. www.membean.com
- Brain Pop: An animated website with curricular and educational resources for a variety of subjects and grade levels (mostly for elementary school students). https://www.brainpop.com

Media: Short Video

- TED Talks: A nonpartisan nonprofit devoted to spreading ideas, usually in the form of short, powerful videos with a single, engaging speaker. www.ted.com
- YouTube: Video sharing website that allows users to upload, view, rate, share, and comment on videos. YouTube has a "YouTube education" category that includes resources such as Technology Ed. https://www.youtube.com/user/TEDEducation
- Khan Academy: Educational organization that produces short video lectures, practice exercises, and tools for educators. Khan Academy also recently acquired the educational app company Duck Duck Moose to enter the personalized early learning arena for young children. www.khanacademy.org





• GoNoodle: Website featuring short physical activity videos including yoga, exercise routines, and dance. Originally intended for school use but applicable for home as well. The "plus" version includes curricular elements embedded in the videos. www.gonoodle.com/

Media: eBooks

- Zing by Schoolwide: Provides educators, parents, and students unlimited free access to thousands
 of English and Spanish eBooks. www.schoolwide.com/zing
- Speakaboos: A library of over 200 interactive stories and songs designed for kids ages 2-6. www.speakaboos.com
- Epic!: Subscription-based eBooks for kids ages 12 and under, with progress tracking, read-to-me and audiobooks, and personalized recommendations. www.getepic.com

Media: Podcasts

- A History of the World in 100 Objects: 100-part series by the British Museum as an introduction to human history. Each 15-minute episode focuses on an object in the British Museum's collections. www.bbc.co.uk/programmes/boonrtf5
- How to Do Everything: Two hosts answer user submitted queries, covering topics ranging from "how to get people to remember your name" to "how to keep French fries crispy."
 www.howtodoeverything.org
- RadioLab: Focuses on scientific and philosophical topics, presented in an accessible and light-hearted manner. www.radiolab.org
- Star Talk Radio: Podcast hosted by astrophysicist Neil deGrasse Tyson focused on space, science, and popular culture. www.startalkradio.net

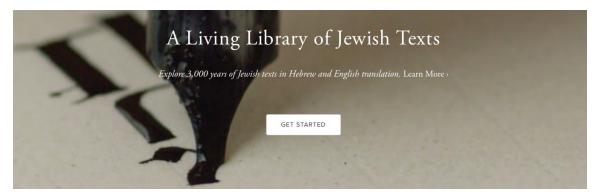
Streaming Services: Film/TV/Music

- Netflix: Recently Netflix announced the launching of children's shows aimed at addressing emotional/educational content.¹⁸ www.netflix.com
- Spotify: In addition to the use of songs and playlists by teachers and parents to engage and educate, Spotify has recently taken further steps in education through the development of "Spotify in Education" and the formation of an Advisory Board comprised of educators. Spotify's educational initiatives up to this point include the donation of a recording studio to a school; "a collaborative #ThankATeacher playlist; #KeepSinging, an initiative that encourages parents to use music in activities related to early childhood development;" and participation in the U.S. Secretary of Education's "Back To School Bus Tour." https://www.spotify.com/us/

Related Jewish Tools

Curricular Databases and Resources

• Sefaria: A comprehensive, open-source database of Jewish texts in both Hebrew and English, along with a source sheet creator that teachers and students can use both individually and collaboratively. Source sheets are curated and organized in order to be shared and accessed. www.sefaria.org



- Great Jewish Books Teacher Resources: The Yiddish Book Center's online database of lesson plan kits for specific works of modern Jewish literature. www.teachgreatjewishbooks.org
- Jewish Learning Matters: A crowd-sourced resource bank with lessons, projects, and games for Jewish learning. Users can post their own resources and use and review others' resources. www.jewishlearningmatters.com
- The Digital J Learning Network: Resources for teaching Jewish topics with a specific emphasis
 on technology integration. www.digitaljlearning.org



¹⁸ www.thedrum.com/news/2016/09/28/netflix-will-debut-issues-focused-childrens-television-show-oct-1

¹⁹ https://news.spotify.com/us/2016/09/14/spotify-for-education-launches-with-advisory-board/

- Chinuch.org: A website of various resources, lessons, and texts. www.chinuch.org
- Behrman House: A variety of curricular and topic based resources for Judaic lesson plans, activities, games, and media. http://www.behrmanhouse.com/
- **JLearnHub:** A resource for teachers and students, including lessons in Hebrew language and prayer. (This site seems to be just starting and in development.) www.jlearnhub.com
- Facing History and Ourselves: A variety of offerings for teachers including lessons and
 professional development surrounding the Holocaust and other genocides. www.facinghistory.org
- Rozzy's Discovering Israel through STEAM Careers (DISC): A program for PreK-3rd grade classrooms that provides teachers with lessons and resources to introduce young children to STEAM innovations created by Jewish people in Israel. www.rozzylearningcompany.com
- Brain Pop Hebrew: An Israeli based Hebrew website with curricular content similar to that of Brain Pop. http://www.brainpop.co.il/

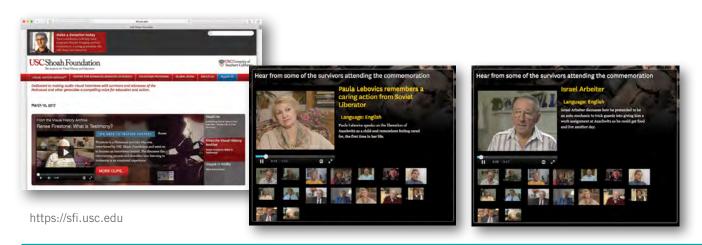
General Jewish Educational Resources²⁰

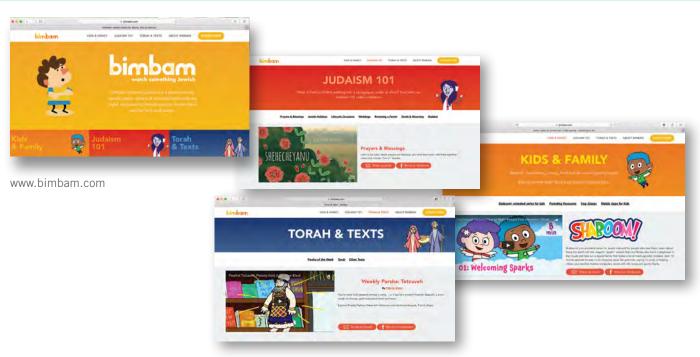
- My Jewish Learning: A trans-denominational website of information about Judaism, with an abundance of information including articles about a variety of Jewish topics, recipes, and quiz-like activities. www.myjewishlearning.com
- The Shoah Foundation: Archive of video interviews with survivors and witnesses of the Holocaust and other genocides. Also includes IWitness, an educational tool that pairs the interviews with multi-media learning activities for middle school and high school students. http://sfi.usc.edu
- BimBam: Jewish videos, apps, and animated series that teach Jewish ideas and life to kids and adults, with its newest series, "Shaboom!" aimed at families with young children. www.bimbam.com
- InterfaithFamily: Aimed specifically toward interfaith families, this website provides learning resources, and information about community initiatives and advocacy opportunities. http://www.interfaithfamily.com/
- **PocketTorah:** A free app that teaches the chanting of the weekly Torah and Haftarah portion. http://www.pockettorah.com/
- Chabad.org: An abundance of sources and resources for learning on a variety of Jewish topics. http://www.chabad.org/library/article_cdo/aid/1675887/jewish/Learning-Values.htm
- RustyBrick Apps: A variety of apps including siddurim, Shabbat times, parsha for children and other Jewish references and topics. www.rustybrick.com/iphone.php

Media: Video/Film, Podcasts, Music

- Alephbeta: Library of short videos covering Jewish topics, holidays, and Torah. www.alephbeta.org
- Shalom Sesame YouTube Channel: Categorized clips from the Jewish Sesame Street Series about various Jewish and Israel related topics and holidays.
 www.youtube.com/user/shalomsesame/featured
- Israel 365: A website with Jewish and Israel related videos and resources. www.Israel365.com
- Learn Hebrew Pod: An online Hebrew language course that teaches via "episodes" about an Israeli group of friends. http://www.learnhebrewpod.com/
- Let It Ripple (Jewish Content): A film company dedicated to using film, technology, discussion materials, and virtual and live events to discuss a variety of challenging and relevant topics. Some content is rooted in or related to Judaism, including "The Making of a Mensch:" http://www.letitripple.org/films/making-of-a-mensch and Character Day: http://www.letitripple.org/character-day/education-hub/

²⁰ In addition to the tools mentioned below, many Jewish educational institutions' and organizations' websites include text-based resources, videos and lesson plans for Jewish topics, texts and holidays.







- Israel Video Network: Online video database with videos about Israel and Jewish content ranging from Jewish music videos to informational ones about Israel. www.israelvideonetwork.com
- 12 Tribe Films: An organization aimed at providing movies and cultural programs that portray Israel and Judaism. www.12tribefilms.org
- Elmad: Pardes' podcast based learning library. http://elmad.pardes.org/
- The Israel Story Podcast: Everyday stories told by, and about, regular Israelis. www.israelstory.org
- Judaism Unbound: A podcast aimed at helping disaffected but hopeful American Jews to re-imagine and re-design Jewish life in America for the 21st Century. www.judaismunbound.com
- Streetwise Hebrew: A podcast dedicated to exploring modern Hebrew language http://tlvi.fm/podcasts/streetwise-hebrew-show/ (A part of TLV-1 Podcasts, which cover other areas part of modern Israeli culture: http://tlvi.fm/podcasts/)

www.israelstory.org





- Unorthodox Podcast: A podcast about Jewish culture and news with a humorous, entertaining slant. http://www.tabletmag.com/author/unorthodox
- Jewish Podcasts: The following link provides a list of popular Jewish podcasts that cover a variety of Jewish topics. www.momentmag.com/top-ten-jewish-podcasts-reader-edition
- An Invitation to Piyut: An archive of Piyuttim that can be played and shared. Available in Hebrew and English as part of the Israel National Library. web.nli.org.il/sites/nlis/he/song and http://old.piyut.org.il/english/
- Girls in Trouble: Original music and related lessons about Biblical women. www.girlsintroublemusic.com
- Jewish Rock Radio: A Jewish rock Internet radio station featuring contemporary Jewish rock
 music and interviews with young people talking about their Jewish lives.
 https://www.jewishrockradio.com/

Further Suggestions for Jewish Education

- The use of short videos seems critical for the implementation of successful Jewish education that both engages and teaches. Audiences of all ages want and are accustomed to learning (and being entertained) through quick, informative, meaningful, and often emotionally powerful visual bursts known as "snackables." Jewish Ed Tech can build on the ability of this content to spread via social media as seen with My Jewish Learning's short video, "Stones on Jewish Gravestones:" www.youtube.com/watch?v=yCf73voLvCk. This video is simple in terms of production but it is well made, and it teaches powerful Jewish content and has emotional appeal. This kind of video, combined with videos that explicitly teach content such as those from Khan Academy, could provide a wealth of Jewish learning resources. Investing in creating a more video-based version of My Jewish Learning, similar to Khan Academy, could be a highly effective teaching tool.
- Consider how Jewish content can be offered via streaming services ranging from playlists with Jewish
 music and specific YouTube channels to the streaming of popular Israeli TV shows (which is already
 done in some cases). Consider creating new content that has universal appeal, similar to Netflix's
 emotional learning based shows. This is a doorway into spreading Jewish values.
- Consider the power of music in education and engagement, as inspired by Spotify's entrance into
 education. Initiatives might include recording studios in schools, collaborative playlists shared by
 organizations and groups, and music videos.
- Consider how to bridge learning resources with social media specifically in terms of social media
 campaigns and creating viral content that spreads via social media. For example, build on Reboot's
 Friday app (http://www.thefridayapp.com/about/) with a social media campaign asking users to post
 media for a campaign called something like #MyFriday or #Fridayforme.

Subscription Services

Although not all subscription services are technology related, they are rising in popularity and the automation and ease of receiving goods and content make them very powerful options for delivering content. These services offer users some choice, in terms of frequency of delivery and content, and often seek user feedback in order to deliver more personalized content.

Examples

- Blue Apron: A food subscription service that delivers portioned ingredients and a recipe required to create a meal. https://www.blueapron.com/
- Kiwi Crate (and affiliates): A craft subscription kit for children (also affiliated with Tinker Crate, mentioned above). http://www.kiwicrate.com/
- Stitch Fix: A clothing subscription service based on the user's input and guided by a stylist. https://www.stitchfix.com/

Related Jewish Tools

- Hello Mazel: Quarterly subscription box of Jewish items, meant to be curated for taste, style, and amusement and aimed at higher end, more trendy audiences. http://www.hellomazel.com/
- PJ Library: Monthly delivery of Jewish books (and sometimes other media) for Jewish families. Content varies according to age of children. https://pjlibrary.org/Home
- Stringbridge Kids: Jewish activity and crafts for kids ages 6-12. (Based in Israel) https://stringbridgekids.com/
- 10Q: A program that delivers 10 reflective questions, one a day, for 10 days between Rosh Hashana and Yom Kippur, for the user to answer. The user then receives the answers a year later for further reflection and optional sharing. http://www.doyouroq.com/

²¹ This video had 2.5+ million views on Facebook.

Further Suggestions for Jewish Education

- Build on the success and popularity of these services. Consider Jewish food/recipes, items for holidays, Jewish themed activities for children and families, and different media from film and videos to playlists.
- Consider combining these with distance and virtual educational content. For example, a "make your own mezuzah" craft could be paired with a video or text about why and how to hang a mezuzah. Consider personalization and big data here as well. Perhaps the mezuzah could automatically be sent to a family who just moved to a new home.
- Encourage the collaboration of different organizations for this purpose. For example, PJ Library, BimBam, and Sefaria could each contribute items to a delivery.
- Some aspect of personalization seems critical for these services. Enable users to have some input on the content and frequency of deliveries as well as the ability to provide feedback on previous content.
- Combine such a service with social media and sharing. For example, after making a craft, users can share their finished product.

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Relationship and Community-Building Resources

Social Media, Community, and Lifestyle Websites

Social media is an ideal tool for building communities, delivering and sharing content, and connecting and collaborating with others.²² Social media campaigns are also very powerful tools for spreading messages and engaging community participation.²³ Lifestyle websites aimed at groups with something in common (e.g., parents of young children, bakers/cooks, crafters, etc.) can be powerful community building tools as they bring together people with common interests while simultaneously providing relevant and enriching content. Many of these websites have stronger presences on social media than on their websites.

Examples

Social Media

- Facebook: Users can share status updates (text, photo, video) to the general public or a private list of friends. www.facebook.com
- Instagram: Users can share pictures and videos, either publicly or privately www.instagram.com
- Snapchat: Users once shared short-lived and automatically deleted multimedia, but Snapchat has since expanded to more features with image permanence. www.snapchat.com
- Twitter: Users send and read short 140-character messages, images, and videos (tweets). https://twitter.com/?lang=en
- Pinterest: A photo sharing website where users can upload, save, sort, and manage images (pins) into collections (pinboards). www.pinterest.com

Social Media Campaigns

- The ALS Ice Bucket Challenge: Raised \$115 million over 8 weeks. www.alsa.org/fight-als/ice-bucket-challenge.html
- 12,000 Mini Miracles Campaign: Encouraged WestJet employees to perform and submit videos via social media of 12,000 mini miracles (or random acts of kindness) during 24 hours. http://blog.westjet.com/christmas-miracle/

²² Social Learning Networks (SLNs) are customized networks of social media used by educators and students for shared learning, communication, and collaboration. There are a number of SLNs specifically designed for K-12 school use, and teachers use many of the general social media outlets to share and learn from others.

²³ Most social media platforms require that users be at least 13; however, younger children certainly use them. For most people 13 years old and older, social media is a highly and frequently used tool.

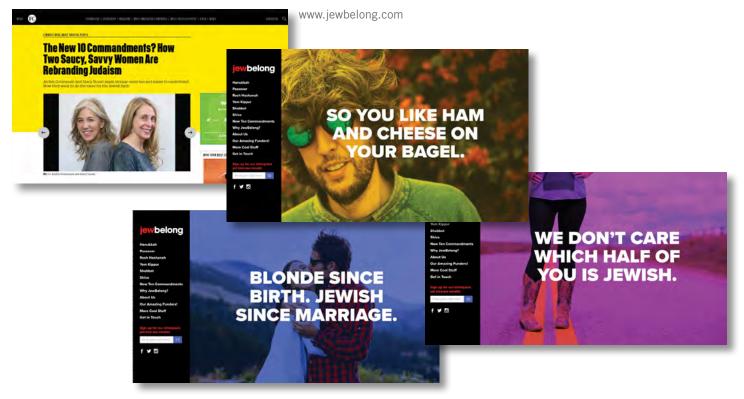
Lifestyle/Community Websites²⁴

- Tasty by Buzzfeed: Food pictures, video recipes, memes, articles, etc. www.buzzfeed.com/tasty or www.facebook.com/buzzfeedtasty/
- Nifty by Buzzfeed: Do-it-yourself projects and crafting ideas.
 www.facebook.com/buzzfeednifty/ or www.buzzfeed.com/nifty
- Now This: News and culture stories reported via video targeted for people who get their news
 on mobile devices and through social streams. www.facebook.com/NowThisNews/

Related Jewish Tech

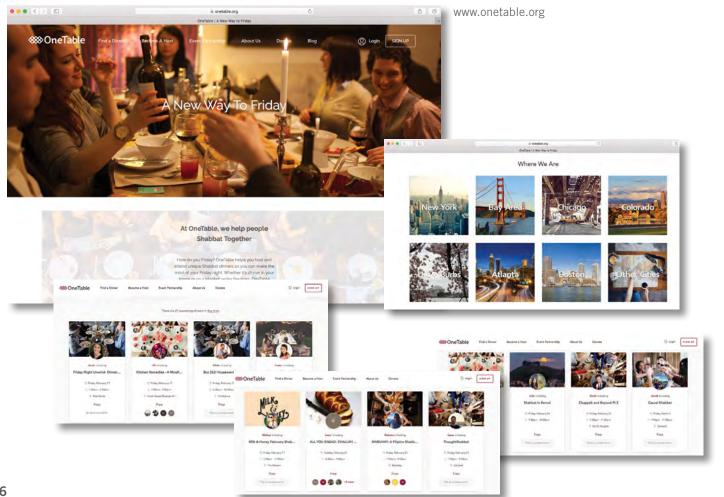
The sites below are examples of those that seem to have the strongest potential to deeply engage and educate Jewish audiences given their relevance to a particular audience. Kveller, for example, is a parenting resource community for mothers, as well as others, with substantial Jewish content. Many follow the model of meeting people where they are and appealing to people's already established interests and passions, be it parenting, the arts, cooking, or connecting with other Jews.

- Kveller: Parenting website with a Jewish slant. www.kveller.com
- Reboot: Inspired by Jewish ritual and embracing the arts, humor, food, philosophy, and social justice, Reboot produces creative projects that spark the interest of young Jews and the larger community. Among their productions are events, exhibitions, recordings, books, films, DIY activity toolkits, and apps. www.rebooters.net
- Jewlicious.com: Jewish blog aimed at engaging young Jews and thinking about Judaism in new ways.
 www.jewlicious.com
- JewBelong.com: Jewish content for Jews of all different levels of involvement and association, aimed at providing a place to start, or new material to help add meaning to users' current routines, with downloadable new ideas, readings and rituals to enrich Jewish celebrations and daily living. www.jewbelong.com/



²⁴ These sites are among the top viewed video content on Facebook: http://tubularinsights.com/top-facebook-video-creators/





- Jewish Food: Videos and articles related to Jewish food including video recipes. www.facebook.com/TheNosher/
- Beyond Bubbe: An interactive community cookbook and a place to share the stories and memories connected to these recipes. http://www.beyondbubbie.com/
- JStory: A website created by and for millennials with a variety of entertainment and content
 including Jewishly themed videos, recipes, and humor. www.yourjstory.com or
 www.facebook.com/yourjstory/
- Hevria.com: A Jewish literary website that includes personal essays, poetry, and articles. www.hevria.com
- One Table: A Shabbat meal finding-and-hosting app for young professionals. www.Onetable.org
- Humans of Judaism: A social media feed related to Jewish content including photos, images, memes, and brief interviews with Jews of varying backgrounds. https://www.facebook.com/HumansofJudaism
- The Slice: A social media resource or emailed digest for mostly post college (and college) aged youth to access Jewish content, information and events. https://www.facebook.com/thesliceofficial/
- JSwipe: A Jewish dating app that enables users to find other singles in locations close to them. www.jswipeapp.com
- **JEDLAB:** An active online community of 7,000+ Jewish educators utilizing Facebook as a tool to share ideas and resources. https://www.facebook.com/groups/jdsmedialab

Further Suggestions for Jewish Education

- Short how-to videos like the ones shown on Tasty and Nifty lend themselves very well to different
 skills in Judaism ranging from how to braid challah to how to put on tefillin. These short, wordless,
 videos with music in the background teach explicit content in light, entertaining, and digestible ways.
- Encourage organizations to create opportunities for people to find, host, and attend in-person events that build on or supplement virtual ones.
- Encourage organizations to create social media campaigns to spread their content and generate user content.
- Create additional community/location based programs, similar to JSwipe, that enable people to find in-person events relevant to them (surrounding holidays, Shabbat, and other events) and which can join them with other Jews.

Video Conferencing and Video "Meet-Ups"

The use of video chatting in order to interact with and learn from others is used between classes and different groups as well as for virtual meet-ups during the off-season of camp and other programs, enabling learners to communicate with people far away, as well as gain exposure to different perspectives and communities.

Examples

- Skype/Skype in the Classroom: Can be used for a variety of purposes including distance learning, and virtual field trips, as well as for "Mystery Skype," which enables classes to Skype with another class from somewhere else in the world. www.skype.com
- Google Hangouts: A video conferencing service. http://hangouts.google.com

Jewish-Related Tech

Any general video chat tool can be used to connect students across the world for Jewish educational purposes.

• The Global School Twinning Network: Makes use of video conferencing to connect classes from Jewish communities across the world. www.jewishagency.org/school-twinning/program/31896

Further Suggestions for Jewish Education

Further use of this technology would be greatly beneficial in helping Jewish students in school or at home interact with and learn from each other as well as connect people during the off-season, before or after various in-person Jewish experiences and programs. Schools in the United States, Israel, and elsewhere can connect to each other; scholars can mentor students; college students in the United States can connect with Israeli peers virtually; Jewish families can virtually twin with other families in their neighborhood or anywhere.

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Support for Organizations and Educators

Support for Technology Infrastructure

When effectively implementing technology into education, it is crucial that the appropriate infrastructure and organizational systems are stable and in place. This is a critical need, without which any technology, no matter how interesting and savvy it may be, will not succeed. It is important to note that this need is crucial for educators and content creators alike.

There is also an opportunity to support employing sufficient staff and those who are tech savvy and skilled for developing and implementing technologies, such as website development, database management, communication tools, and social media.

Examples

- Wi-Fi accessibility
- Hardware, software, and proper training for them
- Operational costs
- Staff skilled in technology and/or social media
- Databases and organizational tools, including content management systems (CMS) and learning management systems (LMS)

Professional Development

Professional development (PD) often takes advantage of and is conducted utilizing educational technology through the use of many of the digital tools and resources discussed above, including distance learning, social media, videos, and numerous curricular websites. Teachers use these resources to share teaching tools, including lesson plans, activities, strategies for classroom and behavior management, and content/subject specific resources.

Professional development is essential to the successful and effective implementation of any type of educational technology. Teachers who are expected to use technology must initially be trained to use it. They must be provided with the right tools and resources, supported throughout their use of it and encouraged to and perhaps incentivized to use it.

Examples

- Teachers Pay Teachers: A lesson marketplace where teachers can sell and buy lessons. www.teacherspayteachers.com
- Pinterest: Although not specifically for education, this has become a widely used tool for teachers
 to share lessons, activities, resources, and photos of everything from popular projects to classroom
 setup and design. www.pinterest.com

"You can learn about a tool but you need to know what it can do. I need someone who can handhold and sit with me and create... You never ever invest in any tech if professional development is not a part of the program."



TZVI PITTINSKY, THE FRISCH SCHOOL

Harvard Graduate School of Education (HGSE) Online Professional Development Programs:
 Two-week programs, each of which explores a key concept or practice of particular relevance for today's K-12 educators. www.gse.harvard.edu/ppe/two-week-online-programs

Related Jewish Tools²⁵

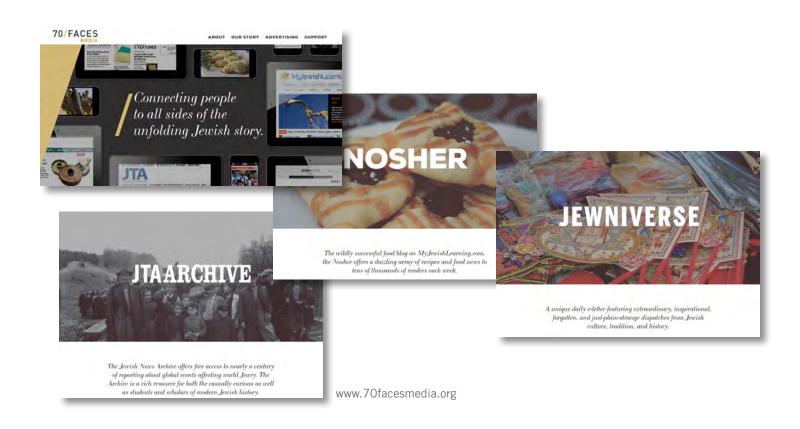
- Hakaveret Jewish Education Innovation Challenge: The formation of a team of educators from a
 variety of backgrounds charged with a year-long process to develop multiple innovative and engaging
 models for delivering Judaic education in Jewish day schools that will then be piloted in North
 American schools. Team members participate in a variety of workshops and conferences and receive
 stipends. http://www.jewishchallenge.org/hakaveret/
- BetterLesson/AVI CHAI Partnership: Created in partnership with the PD organization
 BetterLesson, this program helps teachers implement blended and personalized learning in their
 classrooms. Includes a two-day Design Studio, ongoing virtual coaching, and bi-weekly meetings.
 http://avichai.org/2016/01/personalized-coaching-in-blended-learning-for-jds-teachers/
- The iCenter for Israel Education: Aimed specifically at Israel education, this organization offers a plethora of resources including learning and lesson resources and professional development. http://www.theicenter.org/
- Jerusalem EdTech Symposium PD Program: An Israel-based PD program aimed specifically at
 using technology in Jewish education. A variety of options are available including webinars, asynchronous
 courses, and school-based workshops. www.jetsisrael.com/professional-development-opportunities/
- Mofet Jewish Teacher Education Community/International Portal of Teacher Education: Online portal aimed at collecting and curating research and publications in the field of education. http://mofetinternational.macam.ac.il/jtec/Pages/default.aspx
- Center for Initiatives in Jewish Education (CIJE): CIJE does a variety of professional development
 work including in-school trainings, summer workshops, and informational resources such as the
 CIJE Teacher's Lounge, an online portal. http://www.thecije.org/
- New CAJE: Yearly conference and resources for Jewish educators across denominations and settings
 including schools, camps, JCCs, afterschool programs, and online programs.
 http://www.newcaje.org/
- The DigitalJ Learning Network: A variety of PD opportunities aimed specifically at helping Jewish studies teachers use technology in their classrooms. http://digitaljlearning.org/professional-development
- Jewish New Teacher Project Online Mentor Training: An online support community and mentorship program as part of the Jewish New Teacher Project, which offers support, mentorship, and professional development for new teachers in Jewish schools. http://www.jntp.org/jntp/program-highlights
- New Media in Jewish Studies: Previously mentioned, this program offers PD and training for participating professors and teachers. http://newmediajewishstudies.org/
- JTeach: Online Jewish teacher resource center, launched in 2013 by the Board of Jewish Education/ Marshall Jewish Learning Center (MJLC), to help teachers across the nation gain digital access to high quality, innovative resources and projects. http://jteach.org/
- Jewish Education Project Teen Webinars: Webinars for youth educators focusing on topics relevant to teens. https://www.jewishedproject.org/teen-engagement

²⁵ Many of the educational resources and websites above also include professional development components.

- Jewish Education Project Virtual Network: Facilitator-led groups for different kinds of Jewish
 educators on a variety of topics including prayer, team leading, and design thinking.
 https://www.jewishedproject.org/networks
- Foundation for Jewish Camp Knowledge Center: A variety of digital tools for camp leaders and staff, including webinars and resources on range of topics such as sports, LGBT issues, social activism, and character building. http://www.jewishcamp.org/knowledgecenter?field_resource_topic_tid=20
- Jerusalem U: Israel advocacy resources for teens, college students, and adults including video courses
 and participation in webinars. One program includes financial incentives for college students'
 participation. http://college.jerusalemu.org/, http://college.jerusalemu.org/iio
- BBYO Jewish Enrichment Institute: Training for teen leaders including in-person and online convenings. http://bbyo.org/azabbg/iln/jei2017/
- Hillel International Online Resources: Hillel provides a range of resources and webinars for Hillel staff. http://www.hillel.org/get-involved/work-for-hillel/the-hillel-professional-experience
- Pardes Hillel Professionals Course: An online course for Hillel professionals, focusing on conflict resolution. http://pcjcr.pardes.org/courses/hillel-professionals/
- Interfaith Youth Core Webinars: Webinars for college staff, including Hillel staff related to interfaith activities. An example of a webinar is: "How to Hold an Interfaith Shabbat (and What to Do After It's Over)." The site explains this course is in development with Hillel International. https://www.ifyc.org/content/co-host-webinar

Further Suggestions for Jewish Education

- Respond to educators' requests for incentives for participation in PD, including credit, monetary incentives, or participation in fellowships.
- Create opportunities for pre-, mid-, and perhaps even post-PD sessions so teachers can successfully use educational technologies as well as share impressions after using them, providing suggestions for improvements.
- Create mentorships or partnerships between tech-savvy and less tech-savvy teachers and even a "geek-squad" of students.
- Consult teachers, educators, and administrators to find out their needs and wants for Ed Tech in their schools and classrooms. Consider collaborating with them to create tools.
- Combine PD with hackathons, getting teachers excited about technology in their classroom while also using their input.
- Short-burst PD aimed at specific Ed Tech skills or topics are likely to be appealing and effective for in-service teachers.
- Collaborate with general ed PD organizations, similar to the Better Lesson/AVI CHAI program.





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