TECHNOLOGY AND JEWISH EDUCATION
The allure of technology in education can be hypnotic. Like magic, it promises to lift us into a world of transformative wonder, unbound by the constraints of the rational and the workaday. Push a button, wave a wand, and presto, minds are expanded. But like magic, technology can fall into the trap of specious spectacle and empty gimmickry. How do we strike a balance between staying current and staying cogent? How can we adapt cutting edge technology to our best pedagogical norms without diluting the content of education?

Of course, currency and cogency is a false dichotomy. Perhaps a better way of approaching the issue is to seek ways in which new forms of technology can complement, expand and inform our optimum educational methodologies and practices. After all, at its best, new technology can open vistas of contemplation, communication and creativity with the potential to unleash unprecedented levels of comprehension and educational growth.

Articles in this issue of CONTACT explore the issue of technology and Jewish education from a wide array of angles, from the philosophical to the pragmatic, from the global to the individual. At their core, they share an excitement for bringing ancient Jewish wisdom and experience into a new century of possibility and wonder. Their knowledge and insights can help to revitalize the age-old Jewish ardor for education — which can, in turn, help to revitalize the Jewish community as a whole.
ne of the most striking images in Western culture is that of Galileo Galilei being tried before the Inquisition for his scientific opinions, which contradicted Church dogma. This conflict between the Church and science, responsible to some extent for a slow-down in scientific development in the Middle Ages, was characteristic of Christianity. Jewish tradition, by contrast, never developed dogma regarding science. Over the centuries, the Sages were able to find ways to ignore the scientific statements of earlier authorities, while at the same time adopting and applying contemporary scientific views in the realms of Jewish law (halacha), faith and ethics. Thus, for centuries, Judaism did not come into real conflict with scientific development.

Nonetheless, we can identify a kind of technological intransience that developed as a result of halachic limitations. The best contemporary example of this is how the laws relating to Shabbat prevent halachically observant Jews from enjoying, on one day out of seven, the benefits offered by technology.

This immobility can be found in other spheres as well, most notably in the world of books. For example, the transition from scrolls to bound texts, or codices, revealed an early Luddite strain in Jewish history. A codex has numerous advantages over a scroll — it is cheaper to produce, easier to store and transport, easier to navigate, and its paged structure offers the possibility of creating commentary alongside the texts. Codices had already penetrated general culture, and especially Christian culture, by the Third Century CE. The Jewish world, however, avoided adoption of this format until the Eighth Century. Even then, its adoption was only partial. To this day, Torah scrolls are still handwritten on parchment. The technological format of the scroll became sanctified, following a comprehensive halachic framework defining how a Torah scroll is to be written. Thus, present-day Judaism is perhaps the only human culture that continues to utilize the technology of manuscript scrolls as an active practice.

It would seem that we are now on the verge of another period in which the world of Jewish books will reflect technological fixedness. There is every indication that the world of books is hurtling rapidly toward almost total digitization. It is doubtful that ten years from now there will be any books published in printed form, and within the space of a few decades it is likely that printed books will be found solely in libraries and museums. The only people who are likely to continue to make use of printed books will be observant Jews who wish to read them on Shabbat and who will not be able to make use of electronic devices.

The examples from the Church, or the Luddites who sought to impede the Industrial Revolution, or the Jewish halachists who are stopping us from making unrestricted use of technological advancements, are generally perceived as negative elements that in the best case represent the forces of zealotry and conservatism and in the worst case interfere with human progress. However, from the perspective of cultural development, these obstructive forces play an important and productive role. Scientific and technological advances are powered by scientific discoveries, existential needs and economic motives, but they also have a dramatic influence on other areas: culture, values, ethos and myth. If humankind were to gallop headlong toward the new world, it would lose the ability to reflect on itself and consider the moral implications of progress. Conservative forces cannot stop progress, but they do allow human culture to slow down and examine its implications.

We might understand this better if we look at the value that we ascribe to texts. Almost everyone who grew up in the world of books would find it difficult to see a book being burned, or even one that has been torn. Our reaction to a book, even a telephone book, that has been burned is an emotional one. Do we feel the same way about a disk or a digital file? Probably not. The shift in medium in this instance impinges on our moral attitude to the content transmitted within that medium. The unmoving Jewish world preserves islands in which the text has physical value. On the one hand we treat a Sefer Torah written on parchment with respect, and we even kiss it reverently, while at the same time we remain indifferent to the physical form of a disk containing the very same text. In a world without the unmoving halachic element, we would lose this attitude toward the text — a unique attitude that cannot be reduced to fetishism or to respect for content alone.

This dialectic between the content of the text, which is independent of one or another physical form, and a value-laden physical manifestation of the text has always been a part of the Jewish world. The prohibition against writing the Oral Law, and that against orally reciting texts that are to remain in written form, are outstanding illustrations of this tension. The writing of the Mishnah in the Second Century CE despite these prohibitions, along with the limited number of copies of that text until the 8th century, are a further reflection of this dialectic. Jewish tradition also recognizes the essential nature of living, flowing discourse as well as the power and eternity of the written word, and so it agonizes over the shifts between these two mediums.

The Information Age raises these issues once again, but with greater force. The culture of the Internet opens up new spaces for expression and discourse, in that it provides us with a text that is somewhere between writing and speech. Alongside these new and emerging expanses, online culture also raises questions regarding the stability of the written word as well as the vitality of the spoken word. In an age of wikis in which text is constantly being updated, will we remain a nation that remembers? When the first page of results on Google has become canonical, will there still be a canon? Do Skype conversations and chat sessions preserve the immediate discourse that exists in face-to-face encounters? The presence of this technological fixedness within our intellectual horizons slows things down for a moment and allows us to contemplate these questions.
THE BIG IDEA

The educational concept of 21st Century Learning has gained much traction across the U.S. Many organizations are currently working in this field in both the independent and public sectors. In fact, the Department of Education now maintains 21st Century Community Learning Center after school programs. The aim is to prepare children for living and working in the 21st Century by educating them with the most appropriate and relevant tools, media, and processes. In addition, 21st century learning focuses on ensuring that children build complex skills and the ability to think critically, analyze, be creative, communicate effectively and work independently. A core tenet is learning from interaction and collaboration, relationships and meaningful connections are essential components to support this.

Twenty-first Century Learning is a vision of teaching and learning that transcends physical boundaries and connects people across geographic borders and time zones. Because of their unique makeup, Jewish day schools have the opportunity to be at the forefront of an exciting paradigm shift in education. What are the 21st Century pedagogies to be applied to Jewish education? Transparency, collaboration, technology, reflection, global connectedness, authenticity and prosumerism.

CONCRETE EXAMPLES

Margolin Hebrew Academy/Feinstein Yeshiva of the South, an Orthodox Jewish day school, employs technology to connect students throughout all its programs, but especially through its Jconnect program, which bridges middle- and high-school students from small Jewish communities in meaningful academic ways.

In my school, the Martin J. Gottlieb Day School (a Solomon Schechter Day School), we took a different path. We reexamined job descriptions of all teachers and discovered we had an opportunity to develop 21st Century Learning portfolios for all non-classroom teachers, while still maintaining their core functions. This allowed us to develop a 21st Century Learning Team over three years without adding any new positions. For example, our Technology Teacher grew into a 21st Century Learning Specialist. Instead of serving as simply a source for keyboarding, computer programming and software, she is a coach and collaborator with faculty and students on integrated projects which bring together new methods, interdisciplinary subjects and educational technology. Similarly, our Librarian is now a 21st Century Media and Literacy Specialist and our Academic Resource Specialist has become a 21st Century Pedagogy Consultant. Books still need to be catalogued and students still require remedial services, but by stretching each position into coaching and collaborative relationships with faculty in their areas of expertise, we have been able to transform teaching and learning without adjusting our budget.

A final example of 21st Century Jewish learning in action might be edJEWcon (a project funded by the AVI CHAI Foundation). More than twenty Jewish day schools from across North America sent teams to Jacksonville, FL for a paradigm-shifting experiment in professional development. EdJEWcon is a conference where attendees experience what it means to transition a Jewish day school into a dynamic learning environment. Schools leave edJEWcon with new tools (iPads, iPods, etc.) and their own customizable roadmaps for educational excellence.

WHY SHOULD JEWISH EDUCATION LEAD THE WAY?

Jewish schools have been recognized for their excellent education. A 21st Century Learning focus builds on this history and moves schools to the cutting edge of program excellence by focusing on building the partnerships, resources and capacities to deliver innovative services consistent with a Jewish educational vision.

Jewish education is uniquely positioned to implement this vision, as many elements are currently reflected in our schools’ and programs’ pedagogy, philosophy and approach to learning. For thousands of years, we have been interested in global connectedness. In addition, its focus on Hebrew, probing questions, curriculum integration and other aspects of its pedagogy qualifies Jewish education to grow and lead this work.

AFFORDABILITY

There is additional focus on 21st Century Learning because the field has been keenly interested in seeing how educational technology might positively impact the budgets of Jewish schools, and not just the quality of instruction. If online, virtual or blended learning can reduce the cost while increasing (or at least maintaining) the quality of Jewish education, we might find a holy grail of Jewish schooling.

If the rush to embrace contemporary learning and educational technology does not lead to cost-cutting for Jewish day schools, it’s hard to imagine it contributing meaningfully to a conversation about financial sustainability. In fact, if not managed appropriately, 21st Century Learning runs the risk of making schools less financially sustainable because of increased technology costs.

Twenty-first Century Learning may indeed provide important paths towards the financial sustainability of Jewish education, but it might take more than one form depending on the model or movement. These are exciting times as schools, agencies and foundations are ready to dream dreams. The crisis of affordability is very real. The promise of 21st Century Learning and educational technology is equally real.
Middlebury College is perhaps most well-known for the quality of its language programs and, in particular, its ten summer intensive Language Schools. The Brandeis University–Middlebury School of Hebrew, established in 2008, is the newest and among the most dynamic of these schools.

For nearly twenty years, our Language Schools have been grappling with the question of how new technologies can enhance the teaching of languages. In the mid-1990s, the Andrew W. Mellon Foundation awarded Middlebury a five-year, $5 million grant to advance the teaching of languages. The Foundation recognized that the United States lagged far behind other countries in terms of linguistic and cultural competency, and it believed the place to experiment with new pedagogies was in liberal arts colleges — institutions that are dedicated to student-centered teaching and that ensure small enough classes to allow better assessment of innovative practices. The grant focused on technological innovation, in the hope that recent advances in internet technology and accessibility could assist language faculty in moving from the traditional and unpopular drill-and-kill method of instruction to an exciting, learner-centered, individualized and multimedia-based pedagogy.

The Language Schools teach in an intensive immersion environment. All students sign a Language Pledge® to speak only their target language during the entire summer session. Faculty eat all their meals with students, and there is a co-curricular program ranging from lectures to movies, choir to athletics, cooking to philosophy clubs and more, all done “in language” to provide opportunities for students to use their languages and, at the same time, to learn the cultural context of that use.

This task-based approach to language learning is greatly facilitated by new technologies such as the Internet, social networking and mobile technologies. Several of our Language Schools have experimented with using mobile devices such as iPods or iPhones for vocabulary building exercises and other, more structured elements of language study. At the same time, the Internet liberates language instructors from their dependency on textbooks and allows them to tailor contextualized learning to the curricular needs of specific classes and even individual students. Web archives provide a wealth of authentic materials that are critical to helping students build “islands of understanding” of linguistic and cultural information. Finally, developments in digital audio and video recording enable students to upload their own creations in language and to share and discuss them with others through innovative software programs. This further empowers students to own and invest in their individual learning paths and permits them to experiment with the language in new and creative ways.

Ronald D. Liebowitz, Ph.D., is President of Middlebury College. Michael Geisler, Ph.D., is Vice President of the Languages Schools, Schools Abroad, and Graduate and Special Programs of Middlebury College. For more information about the School of Hebrew and the Language Schools, see: www.middlebury.edu/ls/ and www.middlebury.edu/ls/hebrew.
ways. Contextualized learning also enhances the acquisition of language patterns by relying on students’ natural curiosity and problem solving skills. Learning a foreign language thus becomes an interesting puzzle to be solved instead of a boring, repetitive and tiring chore.

Ironically, today it is Hebrew, which has perhaps the least developed professional association of teachers, that has the greatest potential for elevating the quality of its teaching through the use of technology. Technology is now on a par with — or even ahead of — the pedagogy that has been developed for online teaching and learning. Through a fledgling collaboration between the Middlebury School of Hebrew (SOH) and Hebrew at the Center (HATC), there is a great opportunity to combine the pedagogical expertise and leadership of Professor Vardit Ringvald, the founding director of the School of Hebrew and professor of Hebrew at Brandeis University, with the professional development and teacher support offered by Arnee Winshall and her colleagues at HATC in order to elevate the teaching of Hebrew to numerous constituents by taking advantage of new technologies.

In addition to our seven-week, summer-intensive immersion program on the Middlebury campus, the SOH and HATC plan to take advantage of new technologies to develop certificate programs for proficient speakers of Hebrew who currently teach in classrooms across the country but who have not had the benefit of this caliber of professional training. The collaboration is also in the planning stages of creating a master’s degree program, earned through a combination of on-site and online coursework. The ultimate goal is to create a professional network of Hebrew educators that will support a strong pipeline of proficient Hebrew Language teachers.

Dr. Ringvald and HATC are also working on a program for younger Hebrew learners, and technology will play a role in their vision for that program as well. Middlebury, through Middlebury Interactive Languages (MIL), has for four years offered four-week, summer-language academies — residential programs for Eighth to Twelfth Graders — modeled on the Language Schools’ intensive immersion pedagogy. Students sign a language pledge and partake in classwork and in a robust co-curricular program designed to deepen their contextual understanding of the language.

While the gains made by young students (so far in Arabic, Chinese, French, German and Spanish) have been remarkable, the challenge has been how to help students retain the proficiency they have attained once they leave the summer academy. MIL plans to develop rich materials including interactive games as well as access to tutors for students who attend the academies but lack access to quality language programs in which to continue their studies. A successful pilot program for older students was launched after the 2011 summer Language Schools session. It enabled alumni and alumnae of the School of Hebrew to maintain their newly acquired language skills through a weekly virtual “Language Table” where they interacted with School of Hebrew faculty as well as with each other. If the MIL academies offer Hebrew, technology will play a major role in expanding access to Hebrew language courses from middle school through the master’s degree.

Although Middlebury College is not an institution connected to Jewish education, it has for a long time been associated with and committed to excellence in teaching language and culture. We are excited to help create the opportunity to leverage the College’s expertise, in collaboration with HATC, to be involved at the forefront of strengthening Hebrew language education.
With new learning opportunities enabled by technological advances, adoption of technology in schools is becoming more common throughout the world. More and more American schools are now asking not whether they should incorporate more technology, but how should they do it. Educators and teachers have recognized that technology is not just nice to have — it’s a must-have.

Technology is helping educators to expand beyond sequential, text-based learning and to engage students who learn best when using environments and platforms that are an intrinsic part of their culture.

The role of technology in schools has evolved from a computer class into a versatile learning platform that can change how we demonstrate concepts, assign projects and assess progress.

In our work around the world, we have found that students learn best when:
1. The learning environment is supportive
2. Students’ needs and interests are reflected in the program
3. Students are challenged to develop deep levels of thinking
4. Assessment practices are an integral part of learning
5. Learning connects with communities beyond the classroom

Note the differences between the traditional classroom and the modern classroom that implements technology:

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<thead>
<tr>
<th>Traditional Classroom</th>
<th>Modern Classroom</th>
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<tr>
<td>Passive</td>
<td>Active</td>
</tr>
<tr>
<td>Formal</td>
<td>Informal</td>
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<tr>
<td>Instructor driven</td>
<td>Student driven</td>
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<tr>
<td>Time-dependent linear learning</td>
<td>Time-independent parallel learning</td>
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<tr>
<td>Content defined by the system</td>
<td>Student-driven content</td>
</tr>
<tr>
<td>Student participation is limited</td>
<td>All students participate</td>
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<tr>
<td>Assessment after final evaluation</td>
<td>Ongoing progress assessment</td>
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Yoel and Orly Ganor are the Founders of Ulpan-Or (www.ulpanor.com/).
teaching it is not like teaching Hebrew plays in the Jewish world, based on the unique role Hebrew is not just another subject! Based on the unique role Hebrew is not just another subject!

Ulpan-Or, our Israel-based center for Hebrew studies and Israeli culture, has developed a unique way of harnessing technology for the sake of improving the process of learning Hebrew and making it more effective, faster and more enjoyable for both teachers and students.

Ulpan-Or’s RLA (Rapid Language Acquisition) method, which uses technology to assist pedagogy in the field of Hebrew learning, provides effective solutions that address these elements.

But prior to relating to the role of technology in the Hebrew learning process, one must determine whether in the U.S., Hebrew is generally learned as a foreign language or as a second language. The main difference between a foreign and a second language is in environmental support. If the language is taught in a classroom and the student does not have an opportunity to use it outside the classroom, then it is a foreign language. If the student is supported by the surrounding environment and can use and practice the language beyond his/her formal study, then the status of the language is upgraded to second language.

In most cases, due to objective circumstances, Hebrew is taught in the US as a foreign language, in which students do not have the opportunity to use or practice it outside of their schools. Like a foreign body that is expelled from one’s system, Hebrew as a foreign language is expelled from one’s mind.

The RLA method brings Hebrew much closer to the level of second language. By using new technology platforms and mobile devices, RLA methodology expands Hebrew learning beyond the classroom and creates an immersion environment which provides vast opportunities for students to continue practicing and using Hebrew almost everywhere.

Advantages that are enabled by the use of RLA may be summarized in the acronym “iSMART” as follows:

<table>
<thead>
<tr>
<th>i</th>
<th>Informal Internet Israel</th>
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<tbody>
<tr>
<td>S</td>
<td>Sharing and collaboration Student driven Second language</td>
</tr>
<tr>
<td>M</td>
<td>Mobile environment Motivation</td>
</tr>
<tr>
<td>A</td>
<td>Active All students participate Assessment (built in)</td>
</tr>
<tr>
<td>R</td>
<td>Realm Relevance</td>
</tr>
<tr>
<td>T</td>
<td>Technology Time</td>
</tr>
</tbody>
</table>

Flexible environment Use of online content Connect to Israel

Students collaborate in creating materials and share them Content is student driven Hebrew is upgraded to Second Language

Students use their mobile devices to study outside the classroom Students are motivated to use their mobile devices to study

Students are active in and outside the classroom Each one studies at his/her level and pace Assessment is provided as an integral part of the materials

Use of students’ realms to present the study materials Use of relevant, fresh, up-to-date content

Continual adjustment of materials to technology advancement Nonlinear and not time-dependent study process

One way of applying the RLA method to Hebrew studies is Ulpan-Or’s E-Tone®, an interactive multimedia online weekly publication. The main objective of E-Tone® is to help subscribers view, listen and understand the Israeli media. It uses multimedia technology, conversation and audio/video recordings to teach Hebrew. As a result, students become immersed not only in the language but also in its Israeli context by learning to understand Hebrew via its natural sound and environment. Each weekly edition of E-Tone® is issued in three different levels and includes up-to-date text, audio and video from broadcasts in Israel and around the world. Each item is processed using Ulpan-Or’s unique method, and the items are presented in audio files accompanied by a text file with the relevant vocabulary. In the process of learning and practicing, students are encouraged to download all the E-Tone® items to their PCs, Macs and mobile devices, thus allowing them to be engaged in the learning process outside of school. Parents even reported that their children have prepared their assignments on school buses. Furthermore, students are encouraged to create their own items and collaborate with other students. Once a month, Ulpan-Or holds a contest between participating schools, and the winning item is then published in E-Tone®.

With a device such as an iPad, students are able to create professional quality text, audio and video, upload them to Internet sites and share them via social networks. Using mobile devices which are now part of their culture, students are highly motivated, excited and engaged in the learning process. This continues outside the classroom and assists them in using and practicing Hebrew. As a result, Hebrew becomes not a rote memorization assignment but the living marrow of the Jewish people.

CONTACT
Games, and video games in particular, are the medium of the 21st Century. They are our primary entertainment medium and are quickly becoming a key medium for education.

At the opening of the 2012 Games, Learning, and Society Conference, now in its eighth year, the keynote speaker, Parsons Professor Colleen Macklin, pointed out that Games for learning, and video games in general, have become utterly establishment. Macklin raised two cases to illustrate her point. First, she discussed The White House Office of Science and Technology Policy, where games for learning scholar Constance Steinkuehler is a Senior Policy Analyst. Second, Macklin pointed to the Smithsonian, which in 2012 features the exhibit “The Art of Video Games.” One might add to these establishment credentials that in 2011, Al Gore was the keynote speaker at the 8th Annual Games for Change Festival in New York, and in 2010, former Supreme Court Justice Sandra Day O’Connor, who uses video games to teach civics, was the keynote speaker at Games for Change. There are scholars all over the country and world studying, designing and building learning games in fields ranging from science, technology, engineering, art and math to history and language acquisition. Research is now so plentiful that it is challenging to keep up even in the Learning Sciences subfield of games for learning.

Secular foundations have invested millions of dollars in funding digital media and games for learning initiatives. These foundations include the MacArthur Foundation, the Bill and Melinda Gates Foundation and the AMD Foundation. Since 2006, the MacArthur Foundation alone has awarded grants totaling more than $85 million in Digital Media and Learning. However, the Jewish institutional world had not entered the conversation, despite the obvious benefit of employing digital games in teaching Jewish history, language and rabbinic literature.

In January of 2012, The Covenant Foundation awarded a Signature Grant to ConverJent, the research-based games nonprofit that I run. The grant funded the building of a mobile GPS app to build a digital Aleph-Bet mobile app game. With these first two investments, perhaps the world of Jewish games for learning is opening up. Beyond admittedly fun trivia-based games like the Jewish version of Apples to Apples, I argue that games have the opportunity to teach more challenging and substantive Jewish content.

Arizona State University Professor James Paul Gee’s pioneering work in learning with video games revealed that good games model complex systems and provide scaffolded learning for players. They hold learners’ interest, provide immediate feedback and reward effort without punishing failure. Consider, for example, the commercial and smash hit game Portal 2, a complex and compelling puzzle game now used to teach physics. Game design as a mode of learning is just as important as challenging game play. In fact, if we carefully scaffold for our learners, play will hopefully lead to learner-driven design. Portal 2 now offers players the ability to build their own puzzle levels.

Given that we are at the beginning of what I believe will be a new frontier of Jewish learning and pedagogy, in which we use the affordances of technology and media to rethink pedagogy, what might a research and design agenda look like for the coming years of Jewish games for learning? How might we both rethink pedagogy and also revisit lessons from John Dewey and other educational reformers? How might we both rethink pedagogy and also revisit lessons from John Dewey and others, now made even more practical through technology? Through design-based research, it is possible to use current research and theory to inform game designs and game-design studio curricula. Then researchers can gather quantitative and qualitative data in order to iterate further. Iteration allows for the improvement of the design of the game environments and improvements to the design studios where learners model (modify) and create games.

While the agenda for STEM (Science, Technology, Engineering, and Math) is at the forefront of concern for the U.S. government and major secular foundations, what shall be the agenda for Jewish games for learning? What would it mean to use games to provide access to the treasure trove of Jewish wisdom, to give a taste of the delight of studying Torah while challenging students with complex problems and ethical dilemmas? Game players thrive on challenge. One critical aspect of games is that they are built on rule-based systems. Halacha, or Jewish law, comprises just such systems. Similarly, many games involve narratives, we have yet to tap into our aggadot, or legends, for games. We can expand our expectations of Jewish literacy for our learners and invite and challenge them. We can give an engaging experience inside of Talmudic rhetoric and reason, with its structures of argumentation that are often intricately woven and similar to, but not the same as, complex logic puzzles. We can use games to place learners into simulated ethical dilemmas, informed by Jewish principles.

Games can allow us not only to teach Hebrew letter and vowel recognition, but also to move into second-language acquisition. The laws of the Torah can be used as the basis for a game’s community systems. What happens when the yovel, or jubilee, arrives? Just how is society affected, and how would you prepare? Your neighbor has lost his belongings. What are your responsibilities?

Computer systems will allow us to model ancient Jewish villages; the laws in our rabbinic literature will provide the rules to animate the systems. The point here is not ultra-expensive 3D modeling, but a simple system that provides feedback. Rather than immersive virtual environments, we should be working in simple simulations, casual games and strategy games. This way, learners can deepen their knowledge and face challenges without the need for the educational community to compete with commercial software. In fact, currently available Biblical software can be used to create Epistemic Games for Jewish learning: Jewish educators and designers can build practicum-like challenges around already available software in order to lower learners’ barriers to entry in Hebrew and Biblical scholarship. Just as some have used computer games and simulations to teach young learners about engineering and other disciplines (see David Williamson Shaffer, How Computer Games Help Children Learn, Palgrave Macmillan, 2008), we can use games and simulations to unlock Torah usually held in the hands of Torah scholars.

Jewish learning and the teaching of rabbinical literature can flourish in the digital age. The key will be whether we decide to use technology and media to enhance pedagogy based on digital media’s unique attributes such as those found in games, or whether we consider digital networks and shared media simply the next telephone system. The rules are changing. Games and game design show us that learning in the 21st Century is centered around problem solving. Are we willing to take on the challenge? And if not now, when?

**AN AGENDA FOR JEWISH GAMES FOR LEARNING**

_by RABBI OWEN GOTTLIEB_

Not-A-Box Media Lab to build a digital Aleph-Bet mobile app game. With these first two investments, perhaps the world of Jewish games for learning is opening up. Beyond admittedly fun trivia-based games like the Jewish version of Apples to Apples, I argue that games have the opportunity to teach more challenging and substantive Jewish content.

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It’s the STUDENT!

by ELI KANNAI

I

It is 7:15 am in the Cohen family residence. Rabbi Cohen checks his email and takes a look at the morning news while sipping his coffee. His tablet on his lap, he smiles at his wife as she looks up from her tablet after checking the weather. His son, Chanoch, takes out his iPhone headphones while texting a friend and joins them at the table. They all shut down and store their personal devices, which are forbidden at the school they attend, and continue chatting around the kitchen table before heading to school. Rabbi Cohen is a math teacher, his wife, Sarah, teaches Mishnah, and Chanoch, their youngest, is in Tenth Grade.

At first glance, the school would appear to be a technologically advanced Jewish day school. Rabbi Levy, head of the school, is proud of the systems he has acquired. A 62-inch plasma screen greets the students with the day’s announcements, followed by a verse from Tanach: “Educate a child in his own path and even when he is old, he will not depart from it.” (Proverbs, 22, 6) Computers can be found in most classrooms, Smart Boards in many of them, and the school has a laptop cart. And yet, despite the school’s technology, personal tablets and smartphones are forbidden on school property.

Is this school taking full advantage of educational technology? Obviously, this depends on how the faculty uses the technology they have for instruction. But even if the school’s teachers make use of the Smart Boards for interactive teaching and not merely to display text and visual materials, even if they find creative ways to use the computers in the classroom, there might be something lacking. Integrating technology in education does not need to remain at the class or even section level. It can, and should, be directed towards personalized, individualized learning.

Over the last few years, we have witnessed how the Internet changes various industries. First it was the travel industry. We no longer need travel agents to book a flight. With the advent of the Internet, various industries were revolutionized, making changes more radical. Throughout, the move has been towards the individual. The consumer is able to self-serve and make more choices, and the middlemen are cut out of the equation.

The notion of student-centered education — known by the aphorism that the teacher must shift from “a sage on the stage” to “a guide on the side” — is not new. What is new is that with today’s technology, the student really can be at the center. This can happen in two forms: blended learning, in which a teacher integrates online learning into a classroom setting, and exclusively online learning, for which there is no in-school teacher. Blended learning is currently used as early as in Kindergarten, although it is more mainstream in Third Grade and up. Taking an online course requires self-discipline and a level of maturity usually found in middle school and up.

Blended learning enables students to learn individually via computers, with their performances tracked and reported to the teachers. A teacher can then address groups of students struggling with a common challenge while other students continue to learn new material on their computers. Online learning allows students to take courses not offered in their schools (or offered at times that do not meet their schedules) and to take credit recovery classes in the summer. There are various models for a blended-learning educational environment. For an in-depth analysis, see the Innosight Institute report, “Classifying K-12 Blended Learning” (on the web, go to tinyurl.com/7vvosto). In Arizona, the Carpe Diem schools, a Sixth-through-Twelfth-Grade program which consists of on-site teacher/facilitators and computer-assisted instruction, produced a brief video to help explain their system (tinyurl.com/6ovsucu). Students study within learning cubicles with computers; teachers walk around and help students based on performance assessment indicators augmented by the learning management system. Students also participate in group practice sessions with teachers as needed.

Online learning is more like the way many of us learn as adults in order to stay up to date: self-paced, individualized and often project-focused. In his book The Global Achievement Gap (Basic Books, 2008), Tony Wagner lists seven survival skills for today’s teens, and many of them lend themselves well to online learning. Both online and blended learning fit well with the new and evolving area of education known as 21st Century Learning, and day schools are beginning to join in.

While individualization has the potential to personalize and therefore improve day-school education, it may also result in significant financial benefits. First, it may increase enrollment by offering a more attractive range of courses that meets the needs of a wider range of learners, including both gifted and challenged students who sometimes choose non day-school options because of their differences. Second, there could be cost savings: some remedial sections in math and language can be eliminated as the students in these sections are mainstreamed into larger groups, taking advantage of blended learning mechanisms. Ultimately, we may see a different human-resources structure in these schools: perhaps fewer teachers, more part-time experts (sometimes called master teachers) and some corporates. Since HR is the largest line item in a school budget, these changes may have a significant impact on schools’ bottom lines and allow a reduction in tuition.

In the short term, if Rabbi Levy wants his school to begin experimenting with online or blended learning, he may not need to invest in new technology costs. One possibility is to permit students and teachers to bring their own devices to school. It is a shame that families like the Cohens power off before school and power on at home. At the high-school level and increasingly at the middle-school level, most teachers and students already have a computer, perhaps in the form of a smartphone or tablet. As long as the device connects to the school servers, it can be used for education. So as not to encourage barriers based on means, schools might lend devices to those students who do not yet have, or cannot afford, their own. After all, just like a pen or a notebook, an individual device is the key for individualized learning. “Educate a child in his own path and even when he is old, he will not depart from it.” His or her own personalized path is better education in the long run, and is more cost effective to boot.

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JEWISH DAY SCHOOLS, like other private schools, have been slower to embrace online/blended learning, but seem to be warming to its possibilities.

We are on the cusp of a possible reshaping of Jewish day school education in the 21st Century. Online and blended learning holds the potential for a more personalized form of education and a reduction in costs. What are the opportunities and challenges this burgeoning new way of teaching and learning offers to the day school community?

In America generally, early experimentation in online and blended learning has taken place primarily in the public school sector, in two categories: 1. widespread individual online courses (which drew 4 million students in 2010), and 2. fully virtual schools as well as bricks-and-mortar schools in which blended learning is integrated throughout the day. This second category is newer and thus far less common. Jewish day schools, like other private schools, have been slower to embrace online/blended learning, but seem to be warming to its possibilities. As in the public school world, more schools offer the opportunity to enroll in an individual online (and outsourced) class than a fully online or blended program. One notable exception, not explored here, is Chabad, which offers a full online Judaic-studies program for the children of its shluchim spread across the globe.

According to an AVI CHAI commissioned survey that drew responses from 241 Jewish day schools, 25 percent currently offer online courses, and thus far these courses educate a smattering of students in each school. Because of their ready availability, the overwhelming majority of the online courses are in general studies, primarily math. Over time, as schools experiment with different providers and share information about the highest quality vendors in various subject areas, I expect more schools will offer online/blended classes to a greater percentage of their students.

As we move into new forms of teaching, we see an interesting interplay between existing schools and newly formed schools. Indeed, the pressure for more dramatic adoption of online/blended learning will likely come, in part, from a series of new Jewish day schools that integrate it across the school day. Most of these schools are still in their planning phases, although one opened in 2011-12: the Pre-Collegiate Learning Center (PCLC) in East Brunswick, NJ (pclcnj.com). PCLC describes itself as a Jewish high school offering “an academic program of educational excellence in both secular and Jewish studies with a complete rethinking of educational organization.” The school, whose tuition is $7,000, began with eighteen students in its first year and will not likely grow substantially in 2012-13. However, as the educators fine-tune and prove the success of their model, they expect the combination of personalized learning and low tuition to generate increasing interest.

Science and math are the most blended of PCLC’s subjects, combining online classes, some asynchronous instruction (video based, with no live teacher on the computer) and onsite classes and labs. Students also take Hebrew and foreign languages, such as Japanese, via Rosetta Stone. The list of possible online elective courses is enormous, since PCLC contracts with different online course providers as needed. The humanities remain the most traditionally taught of PCLC subjects. The Director of the PCLC, Lauren Ariev Gellman, told me that while the humanities do not lend themselves to asynchronous instruction, these subjects could be enhanced by blended learning offerings that have not yet been developed.

For Jewish studies, PCLC has few online offerings. Given the school’s belief that the best teaching is student-centered and student-driven, it integrates far more Beit Midrash/chevruta time into Jewish studies than do most schools. These Beit Midrash settings take place within the school and are facilitated by Israeli graduates of Yeshivat Mekor Chaim.

As PCLC grows, comes to require a larger space and hires full-time faculty, I am not sure whether it will be able to sustain a $5,000 tuition. The range of student educational needs and motivation levels that can be effectively served by PCLC is also not yet clear. However, if the school does succeed in offering a high-quality education for a cost below that of other Jewish day schools, the beneficiaries will extend beyond PCLC’s own families. Existing day schools will be compelled to lower their costs by changing their own student-teacher ratios through more online and blended learning.

Events in Bergen County, NJ demonstrate the way in which even the announcement of a new school can generate change in existing day schools. In September 2012, Yeshivat He’atid (The Yeshiva of the Future — yeshivatehid.org) opened with 116 students in pre-K through First Grade. It will add one grade per year until it has reached Eighth Grade. The school plans to integrate technology from the earliest grades, with increasing online/blended learning as the students get older. Tuition at Yeshivat He’atid caps at a bit under $10,000, one-third less than the local Jewish day schools charge for elementary and middle school. Because online/blended learning will not be fully integrated until the higher elementary- and middle-school grades, it will be a few years before Yeshivat He’atid fully implements its educational model. However, even before the school opened, its ability to attract more than 100 students sent a message to the other local day schools.

While the other schools had already begun to experiment with online and blended learning, there is some anecdotal evidence that the announcement of Yeshivat He’atid, among other factors, accelerated the experimentation. For now, none of the other day schools has used it as a means of increasing student-teacher ratios to reduce the educational cost per student, but conversations within the community indicate that the schools’ leadership understand the potential financial benefit.

Another school that integrates blended learning has opened in Baltimore, and schools in Los Angeles and Boston are opening this Fall.

The day-school community benefits from the interplay between the cautious experimentation of existing schools and the bold visions represented by newer schools. The potential of online and blended learning is great, but the educational models are new and mostly untested. Parents and educators who embrace the current day school system should be grateful for the careful testing undertaken by their schools, knowing that the school leaders are moving as quickly as they believe is responsible, given the pressure from the new schools. Parents and educators comfortable with greater risk can avail themselves of the new schools and benefit from the lower tuition and personalization inherent in blended learning.

The future of these experiments cannot be foretold, but it is virtually certain that day school education will change dramatically in the next ten years.
Tamara Reese was a little more than six weeks pregnant when she headed to the doctor with her husband and toddler in tow to hear their new addition’s heartbeat for the first time. The doctor wasn’t encouraged by what he saw on the ultrasound. When she came back two weeks later for her next appointment, the doctor sadly pointed to a dark, empty sack where a growing fetus should have been.

There would be no baby.

While at first Tamara and her husband hadn’t told anybody that she was pregnant or that she miscarried, Tamara soon decided to share her story on the Jewish parenting site Kveller.com, where she’s a regular blogger.

“Sharing my loss was almost as hard as going through it,” she wrote. While she couldn’t find a smile to hide her pain, she was able to find words. After posting her story, she was shocked by how instantly she was lifted up by heartfelt comments, emails and Facebook messages. “My friends cried with me, our family enveloped us in prayers and strangers reached out to me,” she said.

But what she found most surprising were the women who shared their own stories of loss after reading hers. Friends, family — women she knew from real life and women she knew only online from the Kveller community — dug down “into that place where you put the memories that hurt and brought them up to help me heal,” she said.

When Kveller.com launched in September 2010, we had lots of ideas about what the site would be. At first, the aim was to provide resources and guidance to Jewish parents — or to families with one Jewish parent — who wanted tips on how to raise a Jewish family.

But Kveller quickly morphed into something else. Rather than teaching parents, the site became a real community, a place where mothers (85 percent of our readers are women) could swap tips and ideas. And the conversations are often quite personal, meandering between miscarriage and abortion, sex and ambition; participants even shared recipes for challah and ideas on how to make the High Holidays more meaningful.

There was a time not so long ago when women didn’t talk (let alone blab on the internet) about things like infant death, miscarriages and infidelity. These were considered private matters that came with a certain amount of shame. Kveller has tried to help remove that shame by giving women a safe place to share their feelings, ideas and concerns.

What’s helped in part to create such a close-knit community is that readers see the same authors and the same commenters time and again. They begin to send each other personal notes. They want to follow each other’s stories. The fact that comments and blog posts aren’t anonymous has helped create a virtual community where readers respond to one another with thoughtful advice and critical questions.

One of the tools that allowed us to build our community and grow our traffic was the implementation of Facebook comments. Every time a reader posts a comment on Kveller, it can appear in the reader’s Facebook feed (it’s her choice), and it is made public to all of the reader’s friends. In the past two years we’ve quadrupled our traffic, and almost one-third of visitors get to us through Facebook.

Our original worry was that making the conversations so public would also cause them to be less personal. But what we’ve found is really the opposite.

Instead, Facebook helps in creating a place of trust. If readers see that friends are posting on a site, they believe it to be a safe environment. And when readers come to Kveller, the first comments they see on any post are the ones written by their own Facebook friends.

Of course, in the end, Facebook is just the tool that helps facilitate the community, but it’s the honesty and courage of our writers and the commenters that has helped forge the community. In addition to Facebook, we also rely on other social media like Twitter and Pinterest as well as our twice-weekly newsletter. From the beginning, we’ve turned to our readers to help us make many decisions about the direction of the website, starting with the name for the site (“Kveller” was the winning entry in our contest).

Granted, we aren’t necessarily using unprece- dented technology to remake the Jewish community — people have been using discussion boards for some time — but people are taking online communities more seriously today. I feel that Kveller is unique in that we do not mind that some of our people will connect only online, and we recognize the online sphere as a genuine and supportive community in its own right. At the same time, through initiatives such as our local calendars’ Jewish events list, which we’ve piloted in the New York metro area, and our partnership with PJ Library, we’re also extending the community by connecting readers in person on a local basis.

Ultimately, Kveller has very few answers, but because our collective community has tons of advice to give, we’ve become a trustworthy place to go to for a variety of opinions, to feel connected to other parents and to hear others’ stories.

As for Tamara, she chronicled a new pregnancy on Kveller, posting photos of her growing belly along with updates about the pregnancy. Before and after she gave birth, the Kveller community was right there alongside her, supporting and sharing in the experience.

Deborah Kolben is the editor of Kveller.com, a Jewish parenting website and project of MyJewishLearning, inc.
Learning communities are an ancient as well as a modern way of sharing knowledge. They develop naturally as people interact with each other. Throughout time, people have welcomed the opportunities to meet, gather and talk, to share stories and to learn from each other. In the late 1980s, a father with a son dying of leukemia turned to the early online community “The Well” for emotional support as well as for medical information and connections. This was the only group of people that he could reach out to late at night. Networks such as this, online as well as offline, are essential building blocks for meaningful conversations between like-minded people. They are essential to personal growth, continuing education and professional development. Today, with easy access to the online world through laptops, tablets and smartphones, many use Twitter feeds and Facebook to quickly share their thoughts and emotions, both personal and professional. They share articles that have impacted their professional practice, news tidbits and personal photos. Such discussions (and learning) offer participants the opportunity to decide what to talk about, personally and/or professionally.

Over the past three decades, this phenomenon has been researched thoroughly, with much attention paid to the development of these intentional learning networks or communities that are often referred to as Communities of Practice.

In Communities of Practice: Learning, Meaning, and Identity (Cambridge University Press, 1999), Etienne Wenger writes that his assumptions regarding learning and knowledge are predicated on certain basic observations:

1. We are social beings. Far from being trivially true, this fact is a central aspect of learning
2. Knowledge is a matter of competence with respect to valued enterprises — such as singing in tune, discovering scientific facts, fixing machines, being convivial
3. Knowing is a matter of participating in the pursuit of such enterprises, of active engagement in the world
4. Meaning — our ability to experience the world and our engagement with it as meaningful — is ultimately what learning is to produce.

As a reflection of these assumptions, the primary focus of learning becomes social participation.

All well-designed professional development programs should include an active and facilitated community of practice to continually support and sustain ongoing learning.

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**WORKING WITH COMMUNITIES TO SUSTAIN SCHOOL LEADERSHIP DEVELOPMENT**

by ESTHER FELDMAN

This is particularly true of online (e-learning) programs that offer fewer, if any, opportunities to interact in real time. Two core elements of a learning community of practice are collaboration and reflection (see Shirley M. Hord, Learning Together, Leading Together: Changing Schools Through Professional Learning Communities. Teachers College Press, 2003). Collaboration offers participants ongoing opportunities to learn from and with each other — providing support, encouragement and feedback. Group reflection provides participants with tools to examine and interpret the lessons learned to gain new understanding.

The nature of day schools — like-minded teachers working around the world, often in isolation from other Jewish day school educators and principals — predicates a need for online education and professional development programs. A robust online professional-development program that incorporates various learning environments and communities of practice can connect educators from diverse locations simultaneously and offer a flexible timetable. Programs that make use of various online platforms and implement both community discussion forums in an asynchronous environment and real-time webinars in a synchronous platform can provide optimal outcomes. In the discussion forums, learners are able to interact with the content and with each other and build their learning communities on their own, individual timetables. These environments typically support thoughtful responses to assignments and discussions. The real-time webinars provide a distributed learning experience while retaining the human element of face-to-face environments. At the same time, online professional development programs can significantly cut costs, an important element for the Jewish educational world.

Our recent experience has highlighted further the added value that learning communities bring to online professional development. Over the past thirteen years, the Lookstein Center has continually developed and employed these types of communities to enrich Jewish educators and leaders. This past year, we combined community-discussion forums and real-time webinars in the Lookstein Center online Principals’ Program, a professional development pilot course for school leaders and aspiring school leaders. We also added narrative skill building to the mix. Using narrative to build case studies helped produce meaningful learning in the online environment.

Over the course of the program, participants have the opportunity to tell their stories and to share personal challenges. In turn, using a case study format, the school leader presents an educational challenge and then solicits questions and comments from the group. Over a period of weeks, the participants discuss the case online, following a set of agreed-upon protocols. They can ask questions, offer comments and suggestions, and share professional resources and materials. Because the discussion is asynchronous, the participants can work on their own time and at their own pace. Later, they meet over a live video webinar to sum up the issues and try to reach solutions and conclusions together. As with the asynchronous discussion forum, all conversations throughout the face-to-face sessions follow a pre-developed set of protocols. These sessions help maintain the human element, strengthen community ties and, at the same time, ease and enliven the asynchronous community discussions. Towards the end of each case-study series, a subject-matter expert is invited to share his/her thoughts and professional reading material and to join the group in an online (synchronous) webinar. Often, the expert brings a completely new perspective to the conversation, enriching the deliberations and offering new and different responses to the school leader’s challenge.

Learning, working and deliberating together with the help of different platforms and various educational tools has built a sustainable learning community in which participants can continue to professionally support each other online beyond the scope of the program.

This online pilot program has demonstrated how we can use 21st Century tools — narrative, online community-discussion forums and real-time webinars — to build learning communities and sustain learning in a program appropriate for the 21st Century school leader.
BERAKHOT 2A

Mishna: From when may one recite the Shema in the evening? From the time when the kohanim (priests) enter to eat their terumah (agricultural gifts) [i.e., sundown] until the end of the first watch [of the night]; this is the view of Rabbi Eliezer. The Sages say: [The Shema] may be recited] until midnight. Rabban Gamliel says: [It may be recited] until the break of dawn. It once happened that [Rabban Gamliel's] son came [home late at night] from a place of feasting. They said to [their father]: "We have not recited the Shema." He said to them: "If dawn has not broken, you are obligated to recite it." Not only in this case was this said; rather, in all cases where the Sages said that some precept can be performed only until midnight — the precept is still in force] until the break of dawn. [Example:] Burning the fats and organs of the sacrifices, on the altar — this precept can be performed until the break of dawn. [Another example:] All sacrifices which may be eaten for one day [of the week] may be consumed until midnight. [Example:] What does the Tanna say in this case: "If so, why did the Sages say that these precepts can be performed only until midnight? To keep a person from sinning." Gemara: What does the Tanna mean? From what? From the reading of the evening first, rather than from the reading of the morning first? The Tanna refers to the case in which one does not rise to pray the Shema in the morning. "...when you lie down..." he means to say: What is the time when the kohanim enter to eat their terumah? And he means to say thus: What is the Shema at lying down? From the time when the kohanim enter to eat their terumah.
those that are there are often unavailable in
ably, many core texts are not yet online, and
the printed book to new media. Remark-
structured, public database that would
no one has yet developed a comprehensive,
of the site is viewable at www.sefaria.org.
to use and reuse as they like. A public beta
allel translations. The interface will work on
free and in the public domain, and with par-
put our entire common textual heritage
what we're trying to build. First, we aim to
translation reverently arguing with each other,
interpreting and reinterpreting our tradition's
core texts. While the printed page may have
once been the best vehicle for this conversa-
tion, we believe we can do better.
Sefaria is an ambitious project that aims
to radically revolutionize the way both stu-
dents and scholars experience and interact
with Jewish texts. There are several stages to
what we're trying to build. First, we aim to
put our entire common textual heritage
online, in one place, fully interconnected,
free and in the public domain, and with par-
allel translations. The interface will work on
the web, tablets and smartphones for anyone
to use and reuse as they like. A public beta
of the site is viewable at www.sefaria.org.
We find it shocking that at this late date,
no one has yet developed a comprehensive,
structured, public database that would
enable Jewish text study to migrate from
the printed book to new media. Remark-
ably, many core texts are not yet online, and
those that are there are often unavailable in
translation. The best existing online projects
are either incomplete or under copyright
and only available for nontrivial fees, with
restrictions on reuse. Given that these texts
represent our shared heritage, we feel that
they should be freely available in the public
domain.
But putting our common heritage online
is only a first step. Once we have a platform
on which all Jewish texts can speak to each
other, it becomes possible for new conversa-
tions to happen around them, with new
questions and new answers, and maybe even
new participants. Ultimately, we aim to cre-
ate a place where the great Jewish conversa-
tion — the arguments, the storytelling, the
interpretation and reinterpretation — does
not end, but extends far into the future.

If we are successful, this project will
result in a foundational platform with the
power to seriously transform the experience
of Jewish text study. Beginners will have
easy access to texts and commentaries to
help them understand. Scholars will have
an advanced tool for deepening their learn-
ing. People engaging in text study around
the world will be able to connect their
questions and ideas in an open dialogue.
This is an ambitious project. We’ve been
following the principles of a lean startup,
launching with a minimum viable product
(and, to date, no outside funding) and
engaging in aggressive iteration in response
to user feedback. As a result of this kind of
agile development, we quickly realized that
our source sheet builder — a feature that
we thought was only ancillary — is
extremely useful to educators who are tired
of cobbling together sources with Xerox
machines and clunky cut-and-paste.
Engaging educators and scholars is the
key to Sefaria’s success. To build a commu-
nal resource at this scale, we need a com-
munity of stewards that understands the
value of each text, annotation and transla-
tion. Much of our technology is about giv-
ing individuals with textual skills the means
to share them with the world.
All of Sefaria’s code is open source. Our
entire database can be downloaded for reuse,
and we offer a free application programming
interface (API). This means that anyone
working on a future Jewish new-media proj-
ect will be able to use Sefaria’s structured
data to create a new application, plug-in or
research project. We believe the basic infra-
structure for Jewish tech should be free and
shared, enabling new innovators to work on
their innovations instead of reinventing the
foundations with each project.
The greatest challenge we face is in
acquiring translations. Right now there are
no English translations of the Talmud in the
public domain, much less the myriad com-
mentaries, midrashim, and works of halacha
that will ultimately be a part of Sefaria.
(Debates exist about the copyright status of
the Soncino Talmud translation.) However,
we’ve already demonstrated that through
crowd-sourcing, large projects that once
would have taken a single person a lifetime
can be accomplished in a matter of months
by hundreds of motivated individuals
around the world. The dialogue and dis-
agreement that arise over definition and
interpretation only contribute to the greater
generation.
Judaism’s core texts grew out of millen-
nia-long conversations and arguments across
generations. Building on innovations in
interactive social media, Sefaria will be an
open space for ancient conversations to con-
tinue in new ways, with new participants,
new questions and new layers of dialogue.
We believe this platform could be the foun-
dation of a new Talmud, where thousands of
years of Jewish texts can live and breathe
and speak back, and to us. And where we can speak back.

Brett Lockspeiser and Joshua Foer met on the Bronf-
man Youth Fellowship in Israel in 1999. Brett has been
involved with designing and launching web applications
since 2005, first as a product manager at Google, then
with a number of startups and not-for-profit organizations
in San Francisco. At Google he led a team that collected
hundreds of millions of historical articles to create the
Archives of Google News. Joshua is science journalist and
author of Moonwalking with Einstein (Penguin Press,
2011). He is the co-founder of both Atlas Obscura, the
user-generated online guide to the world’s wonders and
curiosities, and the Sukkah City design competition.
It would seem that we are now on the verge of another period in which the world of Jewish books will reflect technological fixedness. There is every indication that the world of books is hurtling rapidly toward almost total digitization. It is doubtful that ten years from now, there will be any books published in printed form, and within the space of a few decades, it is likely that printed books will be found solely in libraries and museums. The only people who are likely to continue to make use of printed books will be observant Jews who wish to read them on Shabbat and who will not be able to make use of electronic devices.

— AVI WARSHAVSKI