

# What Schools Can Learn from Ecological Resilience

■ by **AMANDA GELB**

The author puts forward "resilience" as a useful lens to regard our goals for the classroom, school culture and our students.

Why is the summer's poetry slam on the loss of the Beit HaMikdash (the Holy Temple) seared into our educational memories, while the details of yesterday's Jewish history class can hardly be recalled? Why do the ultimate messages of pride and unity felt at the end of a massive color war ring deeper than silently reading what Rambam has to say about the topic? Schools have the tremendous opportunity and privilege of accessing and serving students for a longer duration and often in more depth than camps, shabbatons, youth groups, etc. And yet informal learning venues are overwhelmingly cited as fun, remarkable places while school is something students may begrudgingly attend.

In a different world, frilly coral colonies, like swirls of tulle, run down the east coast of Australia. Considered one of the seven natural wonders of the world, the Great Barrier Reef is the mother ecosystem, the marine equivalent of the world's largest city. By all accounts, due to the increase of greenhouse gases, the acidification of the ocean and bleaching of coral, the coral should be gone. Wiped off the face of this earth. Yet it is still here, largely still glimmering its majestic colors. How? Ecological resilience. An organism or ecosystem is deemed resilient when it meets three criteria: it undergoes a tremendous change or shock but retains the same essential structure and function; it is capable of self-organization; and it can build and increase its capacity for adaptation and learning. The coral has recovered from major disturbance and further has continued to develop and reproduce.

Resilience theory is a perfect paragon for producing students who are engaged with the subject matter and strengthened in their Jewish identities. Camps, shabbatons, service learning, youth groups and other forms of education offer a dynamism and urgency that's often missing from classrooms. Current parochial schools risk system collapse (read: apathetic unengaged students) by not offering dynamic programming in the classroom. Yet we can harness the best elements of these programs to create powerful experiences at the day school level, inside the classrooms themselves.

How we do so is a fundamental question of building resilience, and it starts with creating a hybrid between what is traditionally referred to as "informal" and "formal" education through experiential education. (Let us also dispel the myth that experiential education is learning under a tree, or something of that nature. We are not discussing peppering every few lesson plans with an activity. Rather we are in the practice of making the topic come alive, of the students discovering their role in the topic.)

Antoine de Saint-Exupéry wisely said, "If you want to build a ship, don't drum up people to collect wood and don't assign them tasks and work, but rather teach them to long for the endless immensity of the sea." Our education systems should not be solely focused on memorizing the information to sufficiently pass the test. Rather, it is to create that longing of which Saint-Exupéry speaks, to discover one's self inside the information, to make

that information part of the fabric of one's identity. Information is not only retained this way, it is tangibly felt.

What would a classroom look like through the lens of resilience? For one thing, it would be multi-sensory. I ran a program for a synagogue in Montreal on Jacob robbing his brother Esau (a hunter who is characteristically rough and hairy) of his birthright blessing from their blind father Isaac. As the portion goes, Rebecca gives her preferred son Jacob advice on how to obtain the blessing. We blindfolded a few students who were "Isaacs" so that they



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could experience "blindness." A few of the girls in the room were "Rebeccas" who gave half of the students, the "Jacobs," twine (representing hair) to wrap around their arms and gummy candy (representing the meat). The "Esaus" were given a dash of strong cologne and a different candy, and were told to speak gruffly. The "Isaacs" had to guess which group received the brachah. By utilizing the powerful elements of taste, touch, sight, sound, and smell, the participants were fully engaged and had significantly more to contribute to our discussion afterwards. By enlivening the senses that frequently lie dormant in educational activities, we are involving the whole student, and creating a deeper connection to the material.

A resilient classroom includes multiple methodologies. With the economic recession continuing to rage on, many schools have had to grapple with difficult decisions of hiring and firing. Again, ecology can



provide a model for maximizing efficiency. One of the most innovative ideas in resource sustainability today is rice paddies in India that are used both for growing rice and breeding fish. Same resources being used, double the output. No waste.

Working off this model, knowledge generated in one classroom could be used in another, and experiences and sharing best practices should be openly encouraged. Let's creatively look at the diversity of educators we have in schools to double the educational gain. Let's encourage cross-pollination. Are the English teachers consulting the art teachers? Is the drama teacher asked to come in and help run an exercise on enacting the receiving of the Torah from Sinai?

Perhaps more importantly, are the students themselves—the ruach (spirit) or student government committees, that master doodler in the back row, that chronic texter on the right—co-opted into the curriculum planning stages? Are students themselves encouraged to dream up shiurs, lesson plans, exercises for their class? Want to really get students to master material? Put the onus of facilitating the class's learning on the students themselves. Make them



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the teachers. Guiding this process is important. Proper attention to framing the learning and clear objectives should be shared. Such an approach would herald a watershed moment for Jewish education.

The backbone of experiential learning is a student-influenced inquiry process. Project-based learning and peer-to-peer learning in day schools serve as powerful tools for making this happen. These approaches are at the core of experiential education and, by their very design, promote collaborative classrooms and self-agency—hallmarks of educational resilience. The most successful classroom activities provide students with a clear context and mirror real life tasks, encouraging students to build expertise. The tasks are collaborative, complex and require examining from multiple perspectives and disciplines. Inherent in the project or learning activity is the opportunity for students to reflect on their beliefs and values. Most importantly, the end result is not predetermined; the

door is left open to multiple possible outcomes.

Resilient classrooms consider changing the physical settings and routines of the class by adding or rearranging things. They are dynamic by moving away from rote memorization and towards textual experiences that place the learner in the text. Underlying an activity I ran in which students build a community out of cookies were the questions: What elements and characteristics are essential to a community? What makes a community successful? What do I want my community to look like? Students had more thoughtful and introspective comments to contribute towards our conversation on community once they themselves had to construct their own communities.

Sara Smith incorporated these ideas in a lesson on gleaning, based on the second chapter of the Book of Ruth, that she

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taught to the 8th grade at Pressman Academy in Los Angeles. She had students literally glean, using pennies to represent crops, tapping into the emotions and realities of an impoverished person's lifestyle. Students were informed that they were so poor that their only option for feeding themselves and their fami-

complex dynamic between the owner of the field and his workers, as well as their relationship with the poor who came to glean on their field.”

An ecosystem's dependence on a single type of support, and similarly a classroom's usage of one type of source, creates vulnerability. The experiential classroom's life-

mersion. Ms. Smith's gleaning activity discussion could have brought in texts from agricultural revolutions, other points in Jewish history or law that address the hungry, or included how other religions give to their poor.

Resilience thinking is as much about withstanding tremendous disturbances as it is about using those events to ignite renewal and build a deeper sense of self. Building resilient Jewish identities and values is achieved when students are presented with meaty conflicts. The best way to enact this is by making classrooms challenging for each student via project-based learning, peer-to-peer learning, stimulating activities, probing questions and dynamic texts. Resilience in day schools emphasizes flexibility, a wide variety of disciplines, methodologies and content. It encourages us to anticipate, adapt, and transform in light of unforeseen disturbances and champions both adaptability and persistence. By implementing these strategies we can build resilience in our school cultures, our classrooms, and most importantly, with the students we serve. ■

## For a lesson on the Book of Ruth, the teacher had students literally glean, using pennies to represent crops, tapping into the emotions and realities of an impoverished person's lifestyle.

lies is to go to someone else's field and pick up crops that their workers had dropped on the ground. Three students were selected as workers in the field and given hundreds of pennies to scatter across the room. The remaining students picked up the scattered pennies, but could only do so one at a time. The motivations of the collectors and workers were discussed during the debriefing of the activity. Jewish laws pertaining to these concepts were explained. Ms. Smith shared, “They were able to understand the

blood is drawn from multiple disciplines. Diversity in content presented provides multiple venues for students to connect with the topic. Educators should make and encourage the making of wild connections. Showcase the Maasai tribe in Africa, graffiti art, ancient philosophy, current events, popular video games and comics. Bringing in diverse ideas, cultures, etc. can further be strengthened by presenting students with rich choices that enable them to cultivate their own strategic and narrative im-

## Balancing Skills and Knowledge with Meaningful Experiences

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riors, we should begin with a focus on assessment. If the assessment is authentic, there is a far greater likelihood that the learning will be authentic and meaningful as a result. The most effective way for teachers to begin thinking in terms of authentic assessment is to ask students to show their mastery of what they learned by taking on the role of a “real person” and create a product that a “real person” would create.

The product should be one that has value outside of the classroom. We could ask students to take on the role of a journalist and write a diary as Joseph might have written; write a screenplay in Hebrew; design a book with guidelines that explain how to celebrate a holiday for a family who has just come from another country where they were forbidden from celebrating Jewish holidays; write a chapter in a book on a topic related to Jewish history; develop a plenary session

for an upcoming conference on a topic related to Jewish history, Israeli current history or the situation in the Middle East; take on the role of demographer studying the customs and practices of Jews in another country; write a chapter in a book on the Middle East peace process, or as a collector of Jewish folklore develop a PowerPoint on Jewish music through the ages and its relation to Jewish and world history.

One great strategy to use when assessing students is a RAFT. RAFT stands for Role, Audience, Format and Topic. Teachers ask students to take on a **Role** (travel agent) and develop a product for a particular **Audience** (grade 6 students); teachers outline the **Format** (a travel itinerary with explanations of why each site should be visited and what students will see there) and the **Topic** (plan a two week trip for students visiting Israel, what they should see and the significance of each place).

To make learning meaningful, educators must ask themselves essential questions such as, What is the core idea of the unit? Why should students care about this? How do we want the student to apply the knowledge and skills in everyday life? How can we teach toward application of the knowledge and skills? How will I assess the authentic application of the knowledge and skills? What do I want students to remember and be able to do in ten or twenty years from now as a result of what they learned?

If we as educators can ensure that we are delivering instruction to students in ways that encourage meaningful reflection and the application of knowledge and skills in ways that are relevant, then we will be assured that students are learning important life lessons that will serve them and the broader Jewish community in important ways throughout their lives. ■