

The Kohelet Prize for Interdisciplinary Integration

Rabbi Eliezer Kessler

Over the years of teaching, I came to the realization that my students were lacking a fundamental understanding of the underpinnings of *hilchot* Shabbat, the laws of Shabbat. This led to rote Shabbat observance without context, keeping *halachot* only at a single level, without deeper meaning. As a teacher, one wants to transmit *halachot* in a multi-layered way, so that the repetitive actions of ritual remain an experience understood with sensitivity, complexity and, to some degree, a sense of richness. This will serve the student well into adulthood so that ritual observance is a multi-textured experience that stands the test of time. I also realized that my students took for granted the way many of our modern systems and appliances work and had no idea how complex the science and engineering behind them actually is.

This pedagogic problem is a challenge that is common to every Judaics teacher of the *melachot* (the 39 categories of work prohibited on Shabbat). In order to effectively teach the student about Shabbat, the student must have a basic understanding of how life was before the advent of electricity and modern appliances and the way modern appliances work and how that affects Shabbat observance. Today, when we buy our baking flour in a grocery store, do we understand how to winnow? When our clothes are made in factories, do we understand how to thread a heddle? When our stoves are gas and electric do we know how to billow a fire? On the other hand, do we understand the mechanics of a cell phone and why it may not be used? Do we understand how a lightbulb works and why it may not be turned on?

I realized that in order to break down these barriers to understanding and relevancy my job is twofold. First I must explain, illustrate, and bring to life basic procedures such as how to turn wheat into flour and animal skins into leather, as well as the other procedures related to the thirty-nine categories of *melachot*. Only then will the student be prepared to make the important transfer of this understanding to his real life, modern day Shabbat.

In order to take this learning and make it into real life experiences, I implemented a teaching strategy involving three steps. First, we learn each of the *melachot* using a Smartboard multimedia presentation. When teaching the *melachot* of Shabbat, or any subject of *Limudei Kodesh*, I am aware of the most enticing formats by which my students gain information, namely through computer use and mass media. If we are to make an impact on the lifelong observance of young minds, the material they see in the classroom must be fresh and exciting. The presentation must also be accessible to every kind of learner, whether they are visual, auditory or sensory learners. The goal is to make each lesson as stimulating and compelling as possible.

The second step is the connection to the past. While learning each of the *melachot*, special emphasis is placed on how the melacha was done in the past and how it is done in the present. Harvesting used to be done by hand, each stalk cut and bundled. Today it is done in mass quantities by

large farm machinery. The students are often not aware of processes from our time period, much less from the ancient past upon which our laws are established.

The third step is the connection to the present. The students know that a light may not be turned on, but do they understand the reason behind it? They know that a car may not be driven, but do they know the connection to the melacha that was done in the *Mishkan*, which is the basis for the establishment of the 39 categories of *melachot*? This step is crucial if we expect our students to take their learning and apply it to real-world Shabbat observance, even as technology continues to unfold.

This crucial connection to the past is accomplished in three specific ways. In the classroom, we demonstrate and act out as many of the *melachot* that we can. We thresh, winnow and grind grain, we gin, comb and spin cotton. I have many props such as flails, grinding stones, combing cards and looms. The second way this is accomplished is that we view a professional level video that I created several years ago with funding from the Avi Chai Foundation in which a young boy studying for a test “visits” an 1830’s farm to experience how the *melachot* were done in the past. The video was filmed on a local Texas historical demonstration ranch using 19th-century equipment. As I am a firm believer in providing my materials to other teachers through open source placement, I have placed this video on chinuch.org <https://goo.gl/vE1oZB> where to date it has over 11,000 downloads. This video creates a firm illustration of how the *melachot* were done in the past.

The third way we make this connection to the past is through a visit to the ranch to experience the *melachot* first-hand. This is the highlight of the entire learning experience and concretizes everything we have learned. This trip is the climax of the unit and has become a legendary event in the school so that entering fourth graders look forward to it from the beginning of the school year. Having visited dozens of times myself, each visit brings a new experience. Sometimes we get to plow the ground for planting, sometimes we get to work leather, and we always get an appreciation of the way things were done before technology changed these processes. On our most recent trip, we had the opportunity to pick cotton and take it through all the stages necessary to make thread.

Finally, we focus on bringing the basis of each of the *melachot* to the present. This is done by taking the concepts learned from the *Mishkan* and the way things were done in the past and explaining how we would experience these actions in our daily lives today. We study basic household appliances and systems and learn the concepts and mechanics that make them work and how those concepts apply to Shabbat. Each system brings with it a basic physics, engineering or natural science lesson. The students are fascinated to see how science plays a role in their everyday life. Learning the basics of how the engine in a car works brings a real understanding of why it can’t be driven on Shabbat and how much engineering went into developing it. Learning how a hot water heater works requires an entire lesson on a city water system as well as the physics of water movement in order demonstrate why opening the hot water faucet on Shabbat is prohibited. This heightens the students’ motivation for learning and creates a plethora of practical questions which we examine and research.

Not only does the student truly understand the *melachot* of Shabbat based on the actions related to each during the time the laws were established, but they also feel that it is possible to keep a connection between the ancient and their very modern lives through understanding the way that we perform the same actions today. Ideally, this learning experience keeps the student engaged, learning many concepts about how we live in the modern world. With this approach, the observance of Shabbat is one in which every student—be they a budding engineer, someone who enjoys cooking with his or her mother, or someone who likes to mix paint colors—learns how they should adjust their behaviors on Shabbat, so that they can emulate their Creator in resting from the act of creation. It is always rewarding to hear from students so often the ways they apply what they have learned from these lessons. I want the students to experience Shabbat as a gift, and I know that if these lessons can appeal to their imaginations, curiosity and understanding of the world around them, they will more likely feel that Shabbat has something extra to give to who they uniquely are and how they experience the world.

Rabbi Eliezer Kessler has been passionately teaching third and fourth grade Judaic Studies for 13 years in Houston, Texas. He received semicha from Yeshivas Chofetz Chaim in Queens, New York where he learned that one of the most important skills that one can give his students is the ability to think on their own. A person who is encouraged to think will become a lifelong learner and innovator, looking to understand and enhance the world around him or her. He has been the recipient of the national AviChai Educational Technology Experiment Grant, the Irving L. Samuels Outstanding Teacher Award for Judaic Studies in Houston, Texas and was a North American winner of the 2015 Grinspoon Award for Excellence in Jewish Education. He is dedicated to making his materials available to as many students as possible by making them open source and available to the greater teaching community. As a regular contributor to chinuch.org, his materials have been downloaded by teachers over 60,000 times. He has worked closely with Rabbi Jonathan Rietti to develop curriculum and materials for his worldwide organization of Chinuch Breakthrough and as well as Rabbi Dan Roth of torahlive.com. In addition to designing creative and well-crafted learning materials, he strives to make sure all his students feel affirmed in their feelings of self-worth, a critical component of creating a love of learning and Jewish life.