

“Mishkeh Mechanic / Success Strategist”: a real-world strategy designed to engage students in critical and creative thinking

Welcome! We are so thrilled to have you here, and to the Kohelet prize team, thank you very much for your consideration; to those of you who are just checking out our project, we hope there is something tangible you can take away and use in your classroom. Although this was planned for and implemented in middle school, we have already begun disseminating and using this creative, critical-thinking endeavor within other grade levels; our end goal was to encourage our students to think. Please watch [our introduction and reflections here](#), read our project’s summary and rationale to further understand our reasoning for such a project, and follow the resource list provided below.

Summary and Rationale

Here at Joseph Kushner Hebrew Academy’s middle school, we are always looking to collaborate with one another. One day, Ms. Sundaram, the STEM teacher, and I-- Ms. Landy, the Language Arts teacher-- had been discussing the very-real problem of a lack of students' "looking back" on their failures, and subsequent failing to learn from them. We became worried when we both saw, albeit in different subject matters, the unfortunate consequences of students who were unable-- or, perhaps, were never trained?-- to critically analyze, and thus creatively approach, their work. We wanted to create a highly transferable project that would provide a platform for our, or anyone’s, students to think analytically and out of the box, and ultimately, allow for and encourage real-world learning skills to take place. We also felt it was of vital importance that-- once the project had been completed-- our students would have learned and come to believe that anyone has the potential to be a creative and critical thinker when provided with the appropriate tools. We put our heads together, and realized that although the engineering, *Teshuva* (repentance), and writing/editing processes seemed to be entirely unrelated, we could, in fact, collaborate our subjects and background knowledge in a productive way to help our students think critically and innovatively using their mistakes and successes, both in and out of the classroom.

What came of our brainstorming session was our "Mishkeh Mechanic/Success Strategist" project. In this interdisciplinary project, our eighth grade students completed a project in Ms. Sri's STEM class, documenting their progress throughout by using the online portfolio SeeSaw. We decided to co-teach

these lessons as often as possible, and followed up by having our students craft "non-fiction narratives," where they used the general *Teshuva* (repentance) process to "realize" their mistakes and capitalize upon their successes, all while following the proper writing format and embedding their new writing skills and techniques in their paragraphs. This wearing of the mistake mechanic "hat" proved difficult for our kids-- they were not used to failure, and they certainly had never felt that being "unsuccessful" could be a good thing!-- and their anxieties charged us with the responsibility to make sure that we, too, learned from our mistakes and successes.

We first implemented this project in one of our eighth grade classes-- there were 19 of our 85 eighth grade students in this particular section-- and once we saw how well it worked out, and received such positive feedback from the students involved, we broadened our project to include the remaining 60 or so eighth grade students. For the sake of not overburdening you, our readers and judges, we focused our submission on our first 19 students. Ultimately, we continued expanding our project to the sixth and seventh grade STEM/Language Arts students as well, and have begun working with teachers in the lower and upper grades, too, in this endeavor.

Although this project worked perfectly for our eighth graders, we have received feedback from teachers in other grades-- hear from these middle school teachers, including [this](#) teacher, [this](#) one, and [this](#) one-- who told us they envision using this project in their classrooms.

Dear readers, we are so excited to present to you our "Mishkeh Mechanic/Success Strategist" project. We hope you enjoy reading this as much as we did creating it!

With our respect,

Sri Sundaram and Ariella Landy

“Mistake Mechanic/Success Strategist”

Resource List



To fully understand our “Mishkeh Mechanic/Success Strategist” project, we suggest accessing the resources provided in the order listed below. All resources are linked below and are available within the folder entitled [“Mishkeh Mechanic/Success Strategist.”](#)

- 1) Read [“Project Introduction and Rubrics”](#) (doc)- This, along with the [“Mishkeh Mechanic Non-Fiction Narrative,”](#) were the handouts we used to supplement our in-class explanation of the project.

Why did we include this?

To introduce this project to our students, who have never engaged in such a “stretch” of a cross-curricular endeavor-- after all, STEM and Language Arts don’t seem to be related--, we wanted to provide them with ample resources, and, of course, an end goal. Some students, in fact, have had extremely limited experience with cross-curricular projects, and for those students, we offered an explanation of what we were doing, and why we were doing it. This doc includes the project’s STEM and Language Arts rubrics, as well as offers the necessary “preamble” which we felt would help guide all our students.

- 2) View these “screen recordings”¹ ([here](#), [here](#), and [here](#)) where Ms. Sri (STEM) and Landy (L.A.) explain² their rubrics to students.

Why did we include this?

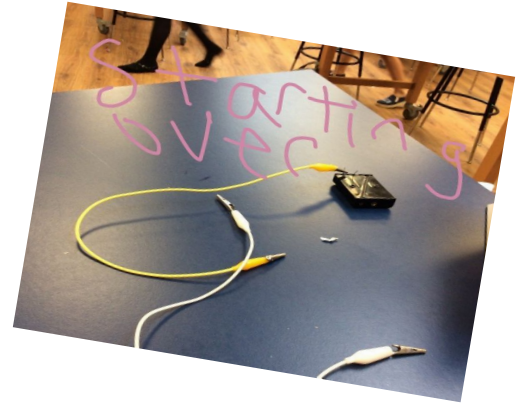
Before we even thought of the Mishkeh Mechanic/Success Strategist idea, we both noted that our students-- particularly those who were struggling to be at or on grade-level-- would often “jump in” to their work, with little to no forethought as to the end goal. While “jumping in,” students would make careless errors, serious mistakes, and, even more importantly, have real, tangible successes, none of which they were critically analysing or using to their benefit. We knew that whether in a Language Arts or STEM classroom, or life in general, students needed to have the



¹ Screen recordings are one of eighth grade L.A.’s most invaluable tools. Throughout the school year, after handing in any completed written work, students receive a screen recording of Ms. Landy, who records her screen, and offers an explanation of their successes while also providing them with 1-2 “next steps.” Ms. Landy embeds the screen recording directly within their submitted Google Doc, and encourages students to respond thoughtfully to her questions and comments by recording their own thoughtful responses, questions, or comments.

² Out of necessity, portions of the project had to be completed at home. We envisioned this and other supplementary and complementary materials to be available at home so that, in a similar vein to [Khan Academy](#), students could work through the project at their own paces.

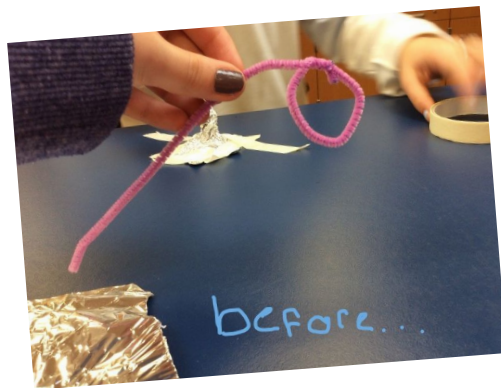
skills and thought processes necessary to “begin with the end in mind.” As such, we included the above recordings of both of our screens and voices; we used these to offer more detailed, in-depth explanations of our rubrics. By requiring students to follow-up our in-class lessons by listening to these three recordings at home, more classroom time could be devoted to the science projects and writing workshops, and one-on-one time, a precious commodity in the large classroom, proved to be very helpful.



3) Watch [this](#) introduction to SeeSaw.

Why did we include this?

We showed this video to our students in class immediately after presenting the project and its end goals. SeeSaw, a digital portfolio app, was our medium of choice; our students were to use it to “show” their work. Within the app, students uploaded drawings and pictures of themselves, and recorded videos; students figured out that they could draw directly on their photos, and showed us just what digital natives can do when given permission to explore. We, in turn, used SeeSaw to comment on, and track the progress of, students’ work. Although SeeSaw as an app has obvious benefits to lower school classrooms-- including a teacher sending home a, “Look what your child did in school today!” email using the SeeSaw app’s broadcasting tool--, we decided to use it within the eighth grade STEM lab so that students could monitor their progresses, or lack thereof, easily share their works with each other and their STEM teacher, Ms. Sri, and provide physical proof of what they just did, all of which proved very helpful when they needed to write about their experiments later in Ms. Landy’s LA class. The students used the photos and videos they took in SeeSaw and embedded them within their written work (literally, by pasting the photos/videos on the doc, and figuratively, by writing about their mistake/success in the paragraph itself).



4) View [this](#) screen recording, where Ms. Sri (STEM) explains how students will be using and implementing SeeSaw in the classroom.

Why did we include this?

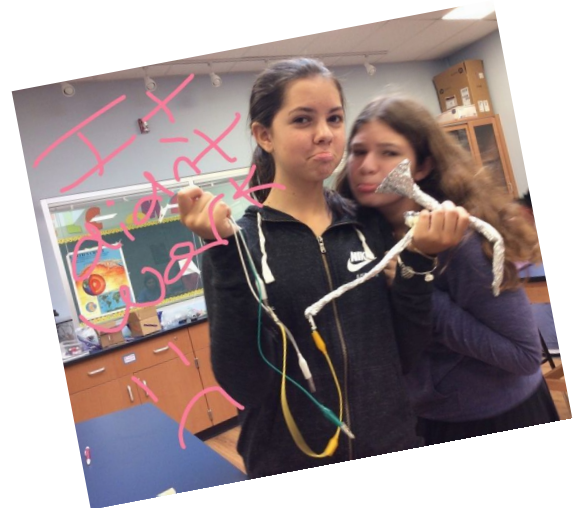
We felt it was crucial for viewers of this project to understand how integral the use of the SeeSaw app was to our project. Students used the app to photograph their projects, which we expected them to. However, we were very surprised that what they really struggled with was noticing and documenting their achievements and successes! While we circulated around the classroom as the students used SeeSaw to record their mistakes, we noticed that nearly all of their successes-- especially the minor ones-- were going entirely unnoticed, and, as a result, undocumented. Our project was created to encourage critical thinking in the form of meta-analyses, and, somewhat ironically, we teachers, who thought this recording of their successes would be an “easy sell” to the students, found it very difficult to have students recognize their own successes and strengths, and, as a result, we needed to analyse ourselves and our teaching in the process. In fact, midway through the project, Ms. Landy instructed students to read this Times of Israel article, “[Ahavnu, beirachnu: Yom Kippur is also a time to confess our good.](#)” This article, written by Avi Weiss of Yeshivat Chovevei Torah, stresses the importance of our spending time focusing on our positive deeds, and not just confessing and atoning for our wrongdoings, as we normally do on Yom Kippur in the “Ashamnu” prayer. In his article, Rabbi Weiss advocates, “not (for) discounting Ashamnu...” but rather that, “we find room alongside our negatives, to feel good about our accomplishments both as individuals and within our community.” We presented this article to the students to offer them a more wide-lens view of how we as a society approach the concept of being proud of our achievements, and, ultimately, we wanted our students to be more critical in their thought-processes.



5) Check out this “[Choose-Your-Own-Path Process Flow Chart.](#)”

Why did we include this?

Students need to “see” in front of them a way for them to move forward, regardless of what stage they are at. Using a flow chart where students, quite literally, are choosing a path, our goal was for students to notice that it is just as likely that they will succeed as they will fail. We created a safe space for learning, where critical thinking abounded, and, in both of our classrooms, students knew that we didn’t care whether or not they failed at this specific project/essay/lab.



- 6) **Navigate through our [Mishkeh Mechanic/Success Strategist “SeeSaw” classroom, which we published as a blog](#)- Once you’ve entered our SeeSaw classroom, you will see multiple photographs and videos. Our students speak for themselves!**

Why did we include this?

We invite you to peruse what we found to be the perfect medium-- our SeeSaw classroom, which we published as a blog-- so you can truly “see” our classroom as we “saw” it. (See what we did there?) Watch the videos, view the pictures, and hear straight from our students, who did a wonderful job and exhibited such critical thinking. Some videos that were not embedded on our SeeSaw blog include these: student [group 1](#), [group 2](#), and [group 3](#).

- 7) **“Paragraphs” (doc)- These Google Docs includes some of the final products. Check out a few of them [here](#), [here](#), [here](#), [here](#), [here](#), and [here](#).**

Why did we include this?

*We included these documents in their *unedited, first draft* forms. We wanted to show you exactly what the students submitted so you, our readers, can see just how personally our students took these projects. After the students submitted these “non-fiction narratives,” they worked on editing them in Language Arts class. They were tasked with editing their works to fix the three writing skills we had been working on in our Language Arts class that week: adding in sentence-strengthening appositives, editing their sentences so the sentences began with subordinating conjunctions, and placing commas after the subordinate clause(s).*

- 8) **Watch some of these (super-candid) interviews: [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), [here](#), and [here](#).**

Why did we include this?

We wanted to hear honest and critical feedback about this project. Our students have never done anything like this before-- neither have we, for that matter!-- and as such, we were very curious to see if this would be a success. In these videos, we asked them some or all of the following questions:

(a) What were your feelings at the beginning/end of the project?

(b) What was your project’s end goal? Did the project work out the way you envisioned it would?

(c) How did this project encourage you to think creatively/critically?

(d) Would you want to do something like this again? How do you think this could be used in different subjects? Lessons? Grades?

(e) Do you have any feedback or advice?

(f) Does this project apply at all to real life? If so, how?

Thank you again for your consideration. We are honored to be a part of something so exciting; rarely do teachers get to exhibit their work in such a unique way. We have been perusing the Kohelet website, and have learned so many transferable and thought-provoking ideas.

It is our goal that we are able to continue this ever-broadening “Mishkeh Mechanic/Success Strategist” project within our school. We hope it becomes a part of our school language and culture, and firmly believe that ultimately, the students will reflect back upon this project with an understanding that these skills learned in the classroom-- that is, thinking about their mistakes and capitalizing upon their successes-- are just as applicable to their real lives.