

Personal Reflection on Differentiated Instruction for *Chopped*:

Chopped beautifully allowed for multiple levels of differentiation throughout the experience and across every level of the project:

- Planning
- Academic levels (halachic skill and knowledge)
- Social groupings
- Learning styles
- Feedback

Differentiated Planning

Thorough planning and gathering of background information were critical for the success of this project. Each student needed to be assigned to a mystery basket and *bracha* challenge that was uniquely appropriate for her. For previous projects over the course of the year, I had differentiated student instruction based on three key areas: academic skill, halachic knowledge, and learning style. In addition to taking these areas under consideration, student input before the project allowed me to differentiate based on food preference and prior cooking experience as well. Differentiation across all of these areas was crucial to this project.

Consider the following student profiles, for example:

<u>Sarah</u>	<u>Devorah</u>	<u>Rachel</u>
Academic skill: mainstream/weak Halachic knowledge & skill mastery: mainstream Learning style: tactile, visual, independent-introvert Cooking experience: extensive Food preferences: vegetarian Allergies: none	Academic skill: mainstream Halachic knowledge & skill mastery: strong Learning style: social, auditory, kinesthetic Cooking experience: none (but strong drive to try) Food preferences: cheese & chocolate Allergies: tree nuts	Academic skill: enrichment Halachic knowledge & skill mastery: strong Learning style: independent-social, visual, auditory Cooking experience: some Food preferences: nothing green Allergies: none

These are three students who, under the differentiation parameters of previous projects, would not have worked together. Their combined discrepancies in learning styles, academic skills, and knowledge usually led to their working in groups with students who had more in common with them. Imagine Sarah's face when she learned that she would be working with an academically gifted student like Rachel. Imagine Rachel's delight to learn that she would finally have the chance to work with her good friend Devorah for the first time all year. Imagine how thrilled Devorah was to learn that she might get personal cooking lessons from an experienced chef like Sarah. All three of these students got to work together on the very same basket of mystery ingredients.

This was their basket:

**Chef Sarah, you are working with
Chefs Devorah and Rachel.**

Your basket ingredients include the following:

Puff Pastry Dough Onion Shredded Cheese Potato Tomato



Sarah will make a recipe out of these ingredients whose bracha is *shehakol*, Devorah will make a recipe out of these ingredients whose bracha is *mezonot* and Rachel will make a recipe out of these ingredients whose bracha is *haadama*.

Rather than differentiating in a way that created academic segregation, *Chopped* teams allowed students to be grouped in a way that felt academically arbitrary yet still challenged each one at their individual zones of proximal development. Teams that seemed to the students to be determined based on food preferences masked the academic differentiation involved.

Sarah was presented with a challenge that would primarily draw upon content and skills already covered throughout the year. Success would require only some mastery of new material. This would allow for Sarah's independent review of previously learned information. It would require minimal work with others to master the new content. Since only one of these basket ingredients (in their normally eaten state) has her assigned *bracha* of *shehakol*, significant culinary manipulation would be needed to create a delicious recipe. In contrast, Devorah was presented with a challenge that would require mastery of both previously learned and new halachic content and skills. Learning the new areas of *halacha* (*ikar v'tafel* with regard to her assigned *bracha* of *mezonot*) would require much time spent learning socially *b'chavruta*. These *halachot* are not mystery-basket-specific, so Devorah could learn the material with any other student facing the same challenge (more on this later). Devorah could even have the opportunity she was hoping for to learn all about cooking from Sarah when developing her recipe. Rachel's challenge, consequently, would require her to attain an even higher level of halachic knowledge and skill mastery. The very same mystery ingredients presented different degrees of challenge depending on the *bracha* applied to them. What a seamless way to bring together students from all academic levels within the class. But academic differentiation played a key role in *Chopped* beyond the basket assignments alone.

Academic Differentiation

The first phase of academic differentiation took place regarding which basket-challenge each student was assigned. At this level, content was initially differentiated based on students' familiarity with *hilchot brachot* as well as ability to apply more abstract concepts. For example, support students were not assigned ingredients or *bracha* challenges that would require them learn about *i'kar v'tafel* for unique cases (such as *mezonot*, equal ratios, or preference) and, instead, received assignments which focused their content learning on how various states of an ingredient can effect the *bracha* said on an ingredient as well as on the collective dish. Content mastery and preparedness were evaluated throughout the year and then, more specifically to this project, through a self-evaluation form before beginning the project.

Academically weaker students privately noted over and over again how empowered they felt to be partnered with one of the "smart girls." One student even shared, "Working with someone who knows more about *halacha* and is so good at school motivated me to work harder and learn more." A different academically weak student who was also paired with an academically strong student later admitted, "When I first saw who was on my team I thought it would be easy because she would just do all of the work and I could get the credit. But this kind of project doesn't even let you do that. Every team member has jobs and responsibilities that only you can do. Someone else can't do it for you. And, anyway, in *Chopped* it's fun so you want to participate, too."

The second phase of academic differentiation took place during the learning of new content throughout the project. Despite the academically mixed nature of the *Chopped* teams, students also had opportunities throughout *Chopped* to learn with others of comparable strengths and background knowledge. For example, two students from separate teams may have the shared challenge of considering the complex *halachot* of *ikar v'tafel* in creating a non-

mezonot dish that effectively incorporates a *mezonot* ingredient (this was Rachel's challenge, for example). Despite being on separate teams, they could *chavruta* together to master challenging new content.

How? I prepared three different colored packets for my students to learn the new halachic material during the project. Each color corresponded to the differences in anticipated challenges that would arise for students depending on the ingredients and *brachot* that they were working with. This essentially meant that each color corresponded to a different level of halachic skill and knowledge.

When I distributed the content packets to each student, I gave them the option to look around the room and learn this material with another girl who had the same color packet. While this certainly led to academically homogenous pairs throughout the room, the pairings did not come across as being determined based on academic level. To the students it felt arbitrary. They were all too excited to discover, as they learned the new *halachot*, that despite their different assignments, they shared common challenges. Rachel, for example, learned the new material with Leah (whose mystery basket appears here for reference).



Chef Leah, you are working with Chef Dina

Your basket ingredients include the following:



Peaches Apples Graham Crackers Whipped Cream Vanilla Pudding

Dina will make a recipe out of these ingredients whose bracha is *mezonot* and Leah will make a recipe out of these ingredients whose bracha is *haetz*.

While my initial development of the packets was to promote academic differentiation, it also allowed for effective social differentiation. The color coding gave more outgoing students (like Rachel and Leah) a chance to work together. The explicit presentation of the content in the packets themselves allowed for more introverted students (like Sarah) to navigate the content independently. Indeed, social differentiation was key from the very beginning of *Chopped*.

Social Differentiation

Chopped avoided many social pitfalls of group projects. Responsibilities for each person in a group were clear rather than assigned as responsibilities for the collective group. Teams had the freedom to choose to work together to whatever degree they wished. As explained earlier, it allowed for groupings across academic and developmental levels.

Students were given choices in how to complete the target goal of the project. A team made of students who enjoy working collaboratively had the opportunity to do so while students who preferred to work independently could do so just as easily. We embraced that, for some groups, working successfully as a team meant working alongside one another.

Students worked with their teammates or other students at various stages of the project. This promoted a community of learning, one in which each person was valued for the unique insights and talents they contributed to the overall experience. Learning from many people and being able to share knowledge with many people generated an overwhelming culture of positivity and confidence.

Sarah also reflected that while working with other students in the classroom was socially challenging for her, "I really enjoyed getting to work with my teammates at my house. I feel really comfortable in my kitchen at home and

that made it easier for me to feel open with them. It was also easier to bond with someone over an experience than over material.”

Differentiated Learning Styles

Educational differentiation does not always come in the form of divisions within a classroom. Sometimes differentiation is allowing different kinds of opportunities for learning to take place over time. *Chopped* was a multi-sensory project. It incorporated visual, auditory, tactile, kinesthetic, and even gastronomical learning. Success in this project demanded that students apply and develop an array of skills and talents. This encouraged them to turn to each other for guidance and insight. This was precisely the case for Rachel and Sarah; Rachel’s auditory prowess and superb content mastery shined as she peer-reviewed Sarah’s *bracha* reasoning before submitting it to the cookbook and was able to help Sarah master a concept that was still eluding her. Sarah’s gourmet talents were celebrated as she taught Rachel how to sauté onions and make her own tomato sauce.

Differentiated Feedback

I used narrative feedback to review work with students throughout the process of brainstorming, prototyping, and implementing their recipe ideas. This provided opportunity for personalized feedback on the individual level of each student to their own learning needs as well as on how each pair was progressing as a team. The entire feedback experience focused on authentic learning and growth rather than on grades.

In addition to providing each student with individualized feedback, I also gave feedback to each group and, ultimately, to the class as a whole. Meeting with each group as a unit gave us the chance to reflect on how things were going beyond the mastery of halachic content and skills. Groups considered what worked well for them; how sometimes they found it best to work alone and sometimes they really needed each other to be successful. Reflecting as a group contributed to powerful insights for individual feedback; during a team feedback session Devorah shared, “What someone brings to the team as an individual may look different depending on who else is in the group and what the [collective] needs of the team are.”

Before submitting their final recipes and *brachot* reasoning for the class cookbook, each student engaged in a two-tier peer-review. First, they needed someone with whom they had not yet worked to review their recipe. Was the language clear? Was it presented in a way that would motivate someone to try the recipe for themselves? For the second tier, when peer-reviewing *brachot* reasonings, students were asked to work with someone with a different color content packet. Had they successfully conveyed complex halachic reasoning to someone who had not focused on that area of *halacha*? Here, once again, students were able to engage in a meaningful way beyond academic levels. In fact, such differentiation was necessary for receiving helpful feedback.

At the end of the project, each student completed a reflection form. These reflections helped me identify trends from my students’ learning that I was then able to address in class, either as celebratory moments or mini-lessons that dig deeper into specific content or skills. We spent the final lesson of the year engaged in a group-reflective session and topped it off with distributing the fresh-off-the-press copies of our class cookbook.

Devorah’s reflection at the end of the project tied it all together:

*“There are different things that connect us with different people.
In order to produce this cookbook, we needed to connect with everybody.”*