Knowledge Representations of the Pesach Seder

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Introduction

The goal of our research project this semester was to uncover the different knowledge representations that our participants had regarding the Pesach Seder. The Pesach Seder is an event that occurs at least once, possibly twice, during the year and is something that almost every Jewish family partakes in. While everyone's Pesach Seder is nuanced in both significant and insignificant ways, the general goal of a Pesach Seder remains the same: to recount the story of the exodus from Egypt over an extended meal experience. While there is much that one could discuss within this domain, we opted to focus on the logistical aspects of the Pesach Seder, such as what is the Seder, what it involves, and what the goal of it is. We attempted to move away from the story of the Exodus, but rather chose to focus on what an Orthodox Seder is and what actions we perform during that night.

We chose to interview two siblings, a fourth grade boy named Moshe and a ninth grade girl named Chana. Throughout our separate interviews with each of them, we attempted to identify what knowledge they possessed about the general Pesach Seder. We wondered if they would be able to clearly identify each part of the seder, as well as provide information about the different portions. We felt that this would be cognitively interesting, as we asked pinpointed questions to uncover the different knowledge representations that they utilized when thinking about the Seder. Did they think about the Seder in the form of a script, and if so, what props were essential to their script? It seemed to us that the script would be most natural knowledge representation for this type of experience, as it is an event that they experience in a similar manner every single year. We also wondered if there were there specific words that triggered

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¹ Names have been changed for privacy purposes.

their thoughts about the Seder or if they had specific associations regarding the Seder that were particular to their own experiences. Lastly, we questioned whether their picture of the Seder plate would be in the form of a mental model, and wondered as to whether this would help them answer questions about specific props from the Seder.

Through a series of interviews, as well as one teaching session, we looked for different key facts. Did they know when, and what the Seder was? Did they know who comes to the Seder, and what the order of the Seder is? Did they know what the seder plate was, as well as why all its different components are essential for the Seder? Did they know any of the key texts that are said over, or any of the actions that characterize the Seder? Did they know the different foods that are eaten, or why we attempt to relive the Exodus experience?

In the interviews, the participants showed use of schemas, scripts, props, mental models, p-prims, and chunking. Schemas are the building blocks of everyday cognition containing knowledge in packets and have slot structures with typical fillers. Scripts are a type of schema for an event that has a typical order of events, typical roles, and typical props that are used. Schemas are activated using either top-down or bottom up processing. These processes entail thinking from general to more specific or vice versa based on different triggers and associations.. A mental model is explanation of someone's thought process about how something works in the real world. Mental models are representations for which the process correspond to processes we can apply when looking at or manipulating objects in the real world. P-prims are simple explanatory or descriptive idea that is a collection of simple, everyday phenomena which people observe. Chunking is a method of presenting information which splits concepts into small pieces or "chunks" of information to make it easier to remember and recall.

All of these representations discussed above were found in our research. We identified that indeed the Seder was structured as a script in their heads, with multiple essential props. It identified which props were more familiar to them, and why that might be so. It showed thatthey had a mental model of the Seder plate, although the model differed between the two participants. It also attempted to understand why certain Hebrew phrases were more readily understood and explained by the participants, while others were seemingly random factoids with no deeper meaning. Our research also highlighted a learning progression from the pre-interview, through the post-interview and the re-interview a week later for both participants. Lastly, our research explored the differences between each of the two participant's level of knowledge, and led to some important implications for future teaching experiences.

Procedure

In order to accomplish our goals, we interviewed each of our participants three times on two separate occasions. On December 8, we performed preliminary interviews with each of our participants. This interview, which we call the "pre-interview" followed a specific written protocol, which was planned in advance. The questions began with the background of when and what is the Seder. We then asked what do we need to have in order for the Seder to begin. Once the participants responded, we followed up with questions that pertained to their answers, such as "what is matzah and why do we use it?" After discussing many of the different items used at the Seder, such as karpas, the haggadah, matzah and marror, we asked them about the seder plate. We used the think-aloud protocol where we had each participant draw a picture of the seder plate while saying out loud what he or she was drawing and what each item represented. This enabled us to receive a greater understanding of the participants' thought processes, as well as a visual

aid. Afterwards, we focused on the order of the Seder and the goal of the it. Based on their responses, we probed their thinking with further questions of why and how. At the end of the interviews, we asked questions about the end of the Seder and also, about how children become involved in the Seder. Each interview used the same basic protocol and questions, but were tailored to the subjects' responses.

After analyzing their responses quickly, we taught about and explained different portions of the Seder based on what we felt that they were lacking or had misunderstood. Our main focus in this teaching session was to reinforce within in their minds that the Seder is meant to be an experience. We taught them about how the Seder is not only a meal, or a rehearing of texts, but rather is something that is meant to show how we went from being poor people to being free men. We discussed how the Seder is meant to be "an experiential evening" in which we try to relive what our forefathers went through. We explained that through the different props, texts, and actions, we are more easily able to relive the pain and suffering in Egypt, as well as the Jewish Nation's Exodus from Egypt. We also explained in depth what each prop (such as matzah, marror, and wine) represented, as well as identified and discussed each section of the seder in a detailed fashion (such as Karpas, Maggid and Hallel). More specifically, we showed them how the Seder attempts to also recount the fact that we no longer have a Temple, and that it also makes a strong effort to engage children in this experience. Lastly, we attempted to fill in basic gaps that were present in their knowledge, such as the names and words of specific songs and texts, as well as the naming of the order of the Seder.

After our teaching session, we re-interviewed our participants again using the same prepared protocol as before, which we call the "post-interview". We did not attempt to change

this protocol, as we wanted to test them on their level of knowledge after the teaching session.

We asked some of the questions in an altered manner, as we felt that perhaps asking a few of the questions in a different way would allow our participants to answer the question more easily.

We returned to interview each of our participants one last time on December 19, which we termed the "re-interview". Waiting this period of time allowed us to gain a greater understanding as to what the participants had actually absorbed from the teaching, and what knowledge they truly possessed about the Pesach Seder. We used the same protocol again, in an attempt to remain consistent with the detail and level of questioning.

Chana - Observation and Analysis

Our first interviewee, Chana, spoke softly and seemed timid throughout our interviews with her. In many ways, she seemed to want to impress us and give the correct answers, which in turn may have affected the tone and the way in which she answered our questions. Our first question was "When is and what is the Seder?" As with other questions, she hesitated greatly and repeated the question multiple times when responding. This may have been because she didn't know what we were asking, or possibly because our questions weren't as clear as we intended. As seen in the full exchange below, this response typified her general uncertainty when answering our questions.

"G: What is the Seder, it's two nights, the first night of Pesach and the second night. And the Seder is [short pause for thinking] it's going through the... What do you mean like what is it? Like what...

I: What is the Seder?

G: [looks confused]

I: If you don't know it's fine... [as girl begins to answer]

G: You're just going through like um, [nervous laughs] um I don't know, like what do you say

I: What are we going through?

G: The Pesach story and like what happens, and all the nissim that Hashem did."

(p.1)

Her answers in this particular segment show that a main part of her Seder Script is focused on the telling of the story of what occurred in Egypt. This remained consistent in the post-interview as well as the re-interview, as seen from the quote below.

"I: Ok, so when is and what is the seder?

G: So, the seder is on Pesach. On the 15th of Nissan. And it is to experience the... (slight chuckle) the meaning of Pesach and of Hashem's, what Hashem's, how Hashem brought us out of Mitzrayim and what the Jews felt when they were experiencing Mitzrayim."

(p.13)

In this response, during the post-interview, the additions of the date of the Seder as well as the language of "experience" were included, probably as a result of the teaching session. However, her general answer remained the same; it was still focused on the story of what occurred to the Jews in Egypt. Her demeanor when answering this question seemed more confident than it had in the pre-interview as she realized that she did know more about this topic than she had originally thought. In the re-interview, her answer remained the same as it had in both previous interviews, although she excluded the exact date which she had learned in the teaching segment, and had remembered in the post-interview. Her lack of synthesis of this answer into her knowledge database may have been a result of how the teaching was conducted, since the date was mentioned, but not emphasized or reinforced in any way.

The fact that her answer remained basically consistent throughout all three interviews highlights that a main part of Chana's Pesach Seder script is focused on the retelling of the Pesach story. Chana seemingly understands, as well, that this discussion occurs primarily in the Maggid section of the Seder, a time when various paragraphs are said. Interestingly though, when pressed to expand further upon these paragraphs, Chana is unable to do so. She seemingly knows various details, such as the makkot and kriyat yam suf, but cannot contextualize where

they fit into the Seder script. These gaps are indicative of the fact that while Chana has a strong concept of the Seder story, she has a difficult time placing where these ideas occur within the Maggid script. It is also possible that these details are not structured as a script in her mind, but instead are random details that are structured in a different format.

When discussing other parts of the Seder script, Chana had a clear understanding of who was involved in the different parts of the Seder. Another integral part of the script are the props, which Chana seemingly knew many details about on a superficial level. However, when pressed, there were gaps in her knowledge needed to be later be corrected or expanded upon in the teaching portion. For example, she knew that four cups of wine were drank at the Seder. She could not explain why wine was used as opposed to any other beverage or what it symbolized. Even after being taught, she did not inculcate this knowledge into her script but still had a basic notion that wine was used but could not expand upon it further.

In order to access the main prop of the Seder plate, we first asked Chana what we need for the seder to begin, which was shortly followed up by the question of how the items were placed on the table. Chana, after mentioning a few props such as matzah and marror, proceeded to tell us that they were placed on the seder plate. This allowed us to enter into the think-aloud protocol. She drew a large circle representing the seder plate and then went into detail, by drawing a number of circles. She then identified what she thought was in each circle and what was underneath the seder plate. These other props, such as charoses, egg and chicken, were only triggered after she had accessed the broader idea of the seder plate.

This think-aloud protocol demonstrated that Chana had a mental model of the seder plate in her head, which she was trying to recreate on paper. It wasn't a totally clear mental model, as the locations of each of the items were not concrete in her mind, but rather one that included some guesswork. She knows what most of the objects on the seder plate are, although she has weak connections between these objects and their use in the various steps of the seder. Chana's mental model of the seder plate also was based on her personal experience, as she frequently referenced the matzahs that were placed beneath the seder plate, something that is not always true.

One of the items mentioned in discussion of the seder plate but discussed fully later, is marror. Throughout her pre-interview, she consistently says "lettuce and marror" when describing various actions that we do with marror, such as eat, dip or make a sandwich. In the teaching portion, we intended to clarify this misconception, by explaining to Chana that lettuce is the main type of marror that is used at most Seders. We needed to explain to her that lettuce and marror were not actually different things with different functions, but rather were utilized for the same purpose at the Seder.

The way in which we clarified Chana's misconception was through the usage of p-prims. She had two p-prims, that of marror and lettuce, which were completely separate items in her mind. In the teaching segment, instead of completely replacing her knowledge of these items, we used our understanding of p-prims to restructure her knowledge. In this way, we were able to explain that marror and lettuce were two items with one function.

When asked to define marror, Chana said the following, "It's a "VaYimarriru es Chayehem." its reminding us of the hard troubles and the tears of the Jews" (p.2).

As she used it many times throughout all three interviews, it is clear that Chana had a clear association between the word marror and the phrase "VaYimarriru es Chayehem". In many

ways, this appears to be a factoid that she knows and proudly recites. We believe this to be true because when she is asked what marror is, a question that she could have answered with her knowledge of its physical appearance, her first response is with this quote. It is not clear if she actually has any understanding about what this quote means, as she never translates it word for word.²

Another prop that was discussed in the interview were the cups of wine or grape juice, which leads to interesting results. Chana never brings these cups up on her own unless she is prompted by the interviewer³, but does have knowledge of how many cups there are and the fact that they are dispersed throughout the Seder. When prompted about when the first cup occurs, Chana remembers the word Kadesh, a moment that is critical in triggering her knowledge of the Seder's order. Originally when asked in the pre-interview about the order of the seder, she doesn't know it. However, once the word Kadesh is triggered, Chana is able to then recite the entire list of the steps of the Seder script by using bottom-up processing. From the general term of Seder, she could not access the steps of kadesh, urchatz etc. However, when the wine was brought up, which prompted the Hebrew term Kadesh, Chana was able to then trigger the rest of the steps. She was very excited by this realization, as seen by the way she responds in this exchange.

"I: Okay, do you remember at any point when we might drink them?

G: First at Kadesh. You drink the first one. [pause] Oh now I remember it!

I: You're welcome to tell it to us.

G: Kadesh, Urchatz, Karpas, Yachatz, Maggid, Ruchtza, Motze Matzah, Marror, Koreich, Shulchan Orech, Tzafun, Barech, Hallel,

² We believe that we should have questioned her further about this, since it would have actually clarified for us whether or not she knew more about this Hebrew phrase.

³ Although our transcripts read, "As you mentioned earlier" by the discussion of wine or grape juice, this was a mistake on behalf of the interviewer as Chana had never mentioned it earlier.

Nirtza.

I: Okay, so how did you remember that?

G: I just was thinking of Kadesh and I remembered how it starts.

I: Okay. Is it in your head in like a chant?

G: Ya [smiles because she finally remembered the order]"

(p.4)

This knowledge remains present for Chana, as in the rest of the pre-interview and in all of the other interviews, she is able to recite the entire list of the order of the seder. Once it was triggered the first time, it was able to be easily accessed afterwards.

When asked about the end of the Seder, Chana discusses the steps of Hallel and Nirtza. She knows what occurs at the end, but not with much detail. When asked about why we say Hallel, she responds that it has to do with what we do on Yom Tov.

"I: Why do we say hallel on pesach night?

G: Why do we say hallel? (pause) I don't know. I don't know specifically why we say it, just praising hashem, we only say that on certain Yamim Tovim."

(p.22)

This reflects her Pesach seder script to be part of a much larger schema of Yom Tov. She knows that in the general Yom Tov schema, there is a part that consists of saying hallel. Therefore, her Pesach seder script does not stand alone, but is seemingly part of other schemas as well.

It is clear that after the teaching segment, Chana incorporates new language to describe the Seder. In the post-interview, she uses words such as "experience" and "poor man's bread" which were words that were constantly emphasized and repeated during the teaching portion. However, when probed further on this, she doesn't seem to have a clear understanding of these concepts. These words have minimal appearance in the re-interview, as they have not been absorbed into her knowledge or knowledge structures, and thus the time gap seemingly affects her recall of them. Her knowledge representations of the Seder script and mental model remain almost entirely the same in all three interview, with minor nuances such as the marror and lettuce

clarification described above.

Moshe - Observation and Analysis

Moshe's interviews also revealed much about his views, representations and thoughts about the Seder. Our original pre-interview began with the following exchange, which asked Moshe to identify what the Seder is all about.

"I: When is and what is the seder?

B: (shakes head, shrugs shoulders) I don't know

I: What is the seder?

B: (shakes head, shrugs shoulders)

I: do you know when we have the seder?

B: oh the seder?

I: yes

B: (laughing) pesach

I: what is it?

B: it's a meal that we have."

(p.23)

Moshe seemingly had difficulty with this question, which may have been a result of two different factors. Firstly, the phrasing of this question may not have been clear enough for him to understand. Secondly, the word "Seder" may not have been enough to trigger his entire Seder schema through his bottom-up reasoning. This might also explain his laughter once he finally realized what we were asking him. Once his bottom-up reasoning was activated, it became laughingly obvious as to what the Seder was and he was somewhat embarrassed by his inability to recognize it originally.

Moshe's response to this question explains his larger perspective on the Seder within the context of the Jewish year as well. When asked to explain what the Seder is, he explains that he believes that it is a meal that we have. This statement indicates that he views the Seder as part of a larger Yom-Tov schema. In this larger framework, events with food translate into meals without greater significance attached to them. This is just like all other Yamim Tovim where we

celebrate by having lavish meals. Interestingly, when he is prompted soon after to explain what else we do at the seder, he states that "we talk about what happened" (p.23) However, when pushed to explain where we talk about these ideas, he responds that it is in "maggid," which he then defines as "davening and stuff" (p.23). His response here also fits in with a greater Yom-Tov schema, as he classifies the texts read as davening. His immediate association with Jewish texts is that of davening which is typically done on Yom-Tov. He is unable to differentiate that the texts here are not of this type. Another indication that the Pesach Seder is part of a larger Yom-Tov schema, is the fact that in our "re-interview" with him, he explains that the reason that we say "Hallel" at the seder is "because its Yom-Tov" (p.46). The more fitting response for this would have been explaining that it is to thank Hashem for taking us out of Egypt.

Moshe's description of the Pesach Seder as a meal was not consistent throughout our three interviews with him. While he explained that the Seder was a meal in his pre-interview, his post-interview revealed that he had absorbed what he had been taught in the teaching. Instead of explaining it as a meal, Moshe instead said that "the seder is to help us remember and make us feel like, remember what our grandfathers were in, and make us feel like we were actually there. And, feel their pain" (p.35). His explanation was clearer than the pre-interview answer, and was more focused on the experiential aspect, entirely excluding the meal explanation. However, when we interviewed him a third time, over one week later, Moshe combined both of his explanations, that of his original answer and that which he learned in the teaching session. He explained that the seder is "a meal that we have, um, on Pesach. Some of it is to remind us what our forefathers were in" (p.41). This response revealed to us that Moshe had integrated his own

answer with the learned explanation to create a deeper, more meaningful understanding for himself. As Moshe's original answer was not incorrect, his new answer was an extension and adaptation, without any clarifications of misconceptions that weren't there originally.

One of the next steps of our interview was to ask him to say the order of the Seder. As will be seen in this exchange, Moshe is unable to identify the order and recall any part of it.

"I: can you give me the order of the seder?

B: (shaking head) I don't remember it

I: how does it begin?

B: we, I don't know...(thinking)

I: do you know it in a song, the order of the seder?

B: (shaking head) I don't remember

I: well, did you ever learn it in a song?

B: probably"

(p.23)

Further, while he mentions the Hebrew names of some of the different sections of the Seder in his responses to different questions, none of these words are enough to trigger his bottom-up reasoning and recall the complete Seder order. In the teaching session, the interviewer begins to go through the order of the Seder with him, and mentions the word Kadesh as being the "first thing we start with" (p.29). Moshe, immediately responds to this, and begins to sing the song, "Kadesh, Urchatz..." (p.30). This clarified for us further that it was not that Moshe did not know the order, but rather that he was unable to activate this song through the top-down question of "can you give me the order of the seder?" or through random mentions of the Hebrew names of different Seder sections (p.23). The word Kadesh and it being the first step of the seder, however, was enough to trigger his bottom-up reasoning and to allow him to access parts of the order of the Seder.

Once Moshe was reminded of the Seder's order, it was clear that he knew the order in chunks. These chunks consisted of some of the parts of the Seder that are commonly grouped

together. In the teaching section, Moshe (along with the interviewer's prompting) goes through the order of the Seder. However, as opposed to just repeating after the interviewer, Moshe would say the term used by the interviewer, along with a few other sections. For example, when the interviewer says "so, you have kadesh," Moshe responds "kadesh, urchatz, yachatz" (p.33). This happens by maggid, when Moshe adds in "maggid, ruchtza, motzi matzah," and then again by Marror, when Moshe exclaims "marror, koreich, shulchan." (p.33). In the re-interview as well, we see that Moshe uses the same chunks to remember the order. Moshe says "kadesh, urchatz, karpas yachatz. (pauses) rachtza (stops singing and starts saying) motzi matzah, (back to singing) maggid rachtza, motzi matzah. (stops singing) shulchan orech, um (thinks) um I forgot the rest" (p.41). Surprisingly, Moshe does not know the end of the song in both parts. Perhaps this indicates that his chunks for the end of the order are not as clear or as well defined as the previous parts of the Seder.

After discussing the order of the Seder, we asked Moshe about the props used at the Seder. We asked him to draw a picture of the seder plate and to talk aloud as he drew. He immediately remembers that there is an egg and a bone on the Seder plate. He seems to think that they are placed in specific spots, saying out loud as he draws, "there's the egg (draws circle), the bone (draws another circle) is here" (p. 27). He draws circles in specific locations to represent where the items are found, jumping around the paper to draw the circles. The fact that he goes back and forth deciding where to place the different items indicates that he possesses a mental model as to what a Seder plate looks like. He is attempting to draw his picture based off of that model. In the post-interview, Moshe is asked to draw the Seder plate and once again, he spends time deciding where in the large circle to place each item. While he says that he does not know

"if these two are here," his organization of the circles and the way in which he draws them seems to show that this mental model exists here as well (p. 36). The re-interview reinforced all of our beliefs as Moshe spends time deliberating where to place the items (in order to match the picture in his head), yet again.

After examining all of our transcriptions of Moshe's interview, we arrived at the broader conclusion that Moshe's schema of the Pesach Seder is quite narrow. The answers he provided us with seem to indicate that his Pesach Seder script, complete with its props and events, is based largely on his own personal Pesach night experience, as opposed to a broader conception of Pesach Sedarim in general. When discussing the seder plate, Moshe mentions multiple times that there are three matzahs that come below it (p.26). While this is not always common practice (nor required minhag), it is clear that Moshe's own family Seder plate is structured as such.⁴ Another example of this is when we ask him what we do with the saltwater in the pre-interview, and he responds "we dip the, we dip potatoes in it" (p.24). The fact that he uses potatoes, as opposed to saying vegetables, implies that he is responding based off of his own experience. Even after the interviewer explains to Moshe that other vegetables are used for karpas, in subsequent interviews, Moshe proceeds to explain that once again potatoes are what is dipped in the saltwater.

Moshe's inability to fully explain the end of the Seder, in multiple parts of the interviews, is seemingly connected to this same issue as well. As Moshe's Pesach Seder script is based directly on his own experiences, it is possible that this is why the end of it is blurry. He is a young child who may not be fully conscious by the end of the seder and therefore, does not know

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⁴ See Chayala's interview as well where she also mentions that the Seder Plate has three matzahs below it

what occurs. For example, in both the pre-interview and the re-interview, we ask Moshe straight out "can you tell me how we end the Seder?" (p.45). Instead of responding in a chronological manner, Moshe explains bits and pieces of the end of the Seder. In the pre-interview, Moshe responds "we pour eliyahu's cup, crack the matzahs and we eat it, one of them, we greet eliyahu at the door, we sing songs" (p.28). While some of these events occur at the end of the seder, the cracking of the matzahs does not actually occur, implying uncertainty again. In the re-interview, he answers "we greet Eliyahu, we bentch, we eat the other piece we left over" (p.41). When asked if it is actually done in that order, he hesitates and responds no. He is aware that this is not the right order, but is uncertain and therefore, proceeds to say it in this manner anyway.

Comparisons/ Larger Interview Conjectures

Chana and Moshe both possessed similar mental models for the Seder Plate, as they each have had similar Pesach experiences of what a Seder plate looks like. However, they each seemingly structured the plate differently in their heads, as we realized from the pictures that we had them draw. Chana seemingly envisioned a seder plate with six circles in specific places, but did not seem to have a model as to where each item belonged on each of those circles. This was demonstrated by the fact that she first drew six circles, and then filled them in. Moshe, on the other hand, worked differently, and seemed to have a model where each item had a specific location. Moshe did not draw the circles and then the items, but instead drew a circle at one location on the plate and then filled it in. He then would consider where the next item was to go, and then would make a circle and fill it in. His deliberations as to where each circle should go showed us that while he too had a model, it was structured differently than Chana's.

Interestingly, they each drew the matzahs under the Seder plate in their images, indicative of the way their personal seder plate is structured.

Both participants possessed strong Pesach Seder scripts, in that they were each able to provide us with many details regarding the logistical aspects of the Seder. However, there were times that we became aware that some of the knowledge they possessed was superficial. For example, we noticed that both Chana and Moshe possessed many Hebrew words with no deeper cognitive structure. They were seemingly just factoids. Although they both knew a lot about the seder props, rarely were they able to connect their english understanding with their known Hebrew word. For example, when asked to explain what Koreich was, each one had a difficult time providing a definition. However, upon discussing matzahs and marror, both mentioned without prompting that those were combined into a sandwich at some point during the Seder. This clarified for us that teachers always need to be conscious of connecting the Hebrew and English terms as that will help to create larger, and correct cognitive structures for students.

It is important to note that the way in which we asked the questions had a big impact on the answers that we received. Sometimes the re-phrasing of a question would provide them with a deeper understanding as to what the answer should be. However, the participants seemingly were very much trying to please us and looked to provide answers that we were looking for. Other factors such as self-confidence played a role in their answers as well, especially in Chana's interviews. Additionally, we realized that the Pesach Seder script is impacted greatly by the home. Each family will do things differently, reinforcing various traditions and focusing on different parts. As both participants come from the same home, many of their answers were similar.

We also realized that there was a lot that we could have done differently in the teaching segment to get different results. We tried to teach too much information that overwhelmed the participants and seemingly little of it was absorbed. There were too many goals involved that were generally discussed instead of breaking down one goal down to basics or details. Therefore, when the interviewees were asked questions, they only minimally understood the general idea that came across in the teaching segment and the information didn't penetrate beyond that. The interviewer for that portion also spoke very quickly, and did not give the participants enough time to process the questions. Asking questions and getting the interviewees more involved would have helped them to process the information and absorb it into their knowledge representation and structures.

Implications and Applications for Future Teaching-Tali

Our findings have many implications onto the broader realm of Jewish education. It is very important as a teacher to build upon students' previous knowledge. This should be emphasized especially with regard to material such as the Pesach Seder, which is something that is learned every year in school. What is learned and taught is reinforced in the home each year when the students experience the Pesach seder. Therefore, before teaching each year, teachers should find a way to gather information about what the students know upon entering their classrooms. This will be a way to also begin to trigger these ideas in student's minds and allow them easier access to this knowledge when learning it in class. When the interviewee, Moshe, was asked what the seder was, he initially could not contextualize this question and respond accordingly. Only after a little time, was he able to answer this question as he did know the

answer but could not immediately access it. Teachers can gather this information in various ways such as by asking questions on a quiz or the like. It is important not to assume that based on certain grade levels that a child knows certain things. We assumed that Chana, a ninth grade student, would know much of what we were asking her. However, it was clear that there were many gaps in her knowledge. If a teacher knew this in advance, then he or she would be able to teach accordingly and fill in the gaps as opposed to just assuming that the knowledge is there and building upon it.

We also learned many important ramifications about teaching in general. The way in which questions are phrased impact a student's thinking, learning and processing. It is important to teach concepts in multiple directions and then ask questions in ways to access all the facets of the knowledge. This will uncover all the different parts of this concept. This is important to keep in mind when quizzing and testing students. Questions may be leading or direct students in ways that they only access certain pieces of information and not others. A good test will challenge students to access information and apply it in new ways. If the test questions, only mimic the way in which it was taught then students may be just memorizing information and repeating it without understanding it. Teaching and testing in this manner is also important with regard to integrating Hebrew words with their English meanings. Teachers should be careful to teach these concepts in both directions so that students have a clear understanding of what Hebrew words are attached to which concepts and vice versa.

Finally, we noted that it is important for teachers to be conscious of correcting misinformation as opposed to expanding on previous knowledge. Teachers should try and distinguish between these two so that students are aware of when they are wrong or right. This

will also prevent students from forgetting or erasing correct knowledge as opposed to restructuring it properly. More time, energy and effort will be saved for both teachers and students if knowledge is just restructured instead of completely replaced. For incorrect information, the knowledge must be changed, replaced or the like. This may be difficult to access as teachers but it is important to recognize and will impact how students learn. Our research, although it focused on only two students' knowledge representations of a specific area, taught us many important ideas that can be more broadly applied to teachers in Jewish education and our own classrooms.