Part 2: Task Analysis and Education Coaching

My name is Megan Goldfarb and I am an undergraduate student at Virginia Commonwealth University, graduating in spring 2018. Since fall of 2016, I have served as an academic support with ACE-IT at VCU, which is a certificate track for college students who have intellectual disabilities.

When working with people who have intellectual disability, one thing you might hear is the importance of breaking tasks into manageable steps that students can tackle one at a time. This process is called task analysis- when referred to in teaching, it is the process of breaking down a task into smaller, more manageable components.

Task analysis was first demonstrated to me in a teaching exercise: In class, we were asked to write out a list of specific instructions on how to make a peanut butter and jelly sandwich. Some students thought that they could explain the process in as little as four steps:

1. Get out ingredients.
2. Put peanut butter on one slice of bread.
3. Put jelly on another slice of bread.
4. Place each slice of bread face to face.

In fact, task analysis can become so specific that those steps can be broken down into many more component parts. (Show the list on the screen but don't read all of the steps). On the screen, you can see that the process of making a peanut butter and jelly sandwich can be broken down into as many as 18 steps, and technically more than that.

1. Open the pantry.
2. Remove peanut butter from the pantry.
3. Remove bread from the pantry.
4. Remove jelly from the fridge.
5. Get a plate out of the cupboard and set it on your work surface.
6. Take a knife out of the drawer and set it by your work surface.
7. Place two slices of bread next to one another on the plate.
8. Open the peanut butter jar.
9. Using the knife, scoop out some peanut butter.
10. Spread the peanut butter on one slice of bread.
11. Put the lid back on the peanut butter.
12. Remove the lid from the jelly.
13. Use the knife to remove jelly from the jar.
14. Spread the jelly on the other slice of bread.
15. Set down the knife
16. Put the lid back on the jelly.
17. Pick up one of the slices of bread.
18. Place the slice on top of the other slice so that the sides with peanut butter and jelly go together, face to face.

Now, many people might not need those 18 steps of instructions to tell them how to make a peanut butter and jelly sandwich. But this serves as an important illustration. Many times, you will find that your peers that you work with are less overwhelmed when assignments are broken down into manageable steps. And sometimes those steps can be broken down further than you   might assume.

When put into practice, task analysis is an incredible tool that a coach or mentor can use to help students study and work on assignments independently. Not every student will need assignments broken down into the same level of specificity. Some might need that full 18 steps of single action maneuvers, while some can work through more compound steps. A good rule of thumb is to try not to make assumptions when you are initially working with a student, and to ask yourself, "Are there ways that these steps can be broken down further? Does this person need those smaller steps?"

I am going to share two examples of ways that I've used task analysis with many of my peers that I've worked with, and share a few more tips on how to implement those steps.

First, I am going to share with you how task analysis has benefited a common study technique: Flashcards.

When I started coaching I noticed that flashcards were a very popular strategy that many students in my program had been using since high school. In working with a couple of students I noted, however, that how they studied flashcards could be made more beneficial. By using task analysis, I worked with the peers that I coached to build a different kind of flashcard studying habit. When studying flashcards, students should go through the following steps:

1. Read the term.
2. Quiz yourself: Do you know what the term means?
3. If you don't know, read the back of the card.
4. Repeat the definition to yourself.
5. Try again. Flip the card to the front and quiz yourself. Do you remember what the term means?
6. Flip the card back to the definition and see if you got it right.

I find often that students will read the front of a flashcard, not know it, read the definition on the other side, and then move on, without taking that essential step of quizzing themselves again to try and recall that definition. So, I work on this step-by-step strategy with them to build a stronger way of studying flashcards. If a student is studying with a friend or a family member, their study partner might often push them to quiz themselves again when they can't remember a term the first time. However, a lot of students like to study by themselves. So, task analysis in this case helps them make the most out of their flashcard studying.

Task analysis can also be used in terms of reading strategies. I've often found my peers doing something that I often do when I read hard texts myself- that is, if they are reading something with

words they do not know, they often keep reading, finish a section, and have trouble understanding it. Often, if you don't understand particular words in a sentence, you might not quite grasp what the sentence means as a whole. So, when I've worked with my peers on reading material for class, I have presented the following series of steps.

When you are reading and having trouble with a sentence, stop and do the following:

1. Identify unfamiliar words.
2. Look unfamiliar words up. (Students and I will find dictionary apps or websites that work for them. Often, Google searches present definitions and synonyms in their simplest forms.)
3. Replace unfamiliar words with synonyms that you know, or with simple definitions.
4. Reread the sentence with the new words.

These steps can become a little bit painstaking, but using them allows students to really take ownership over their reading. It presents them with a way to figure out what something means on their own, and that empowers their reading ability.

I will note that this also works for students who have more trouble with reading and use technology for their computer to read texts aloud instead. I worked with one student who used a Google plugin which read his readings aloud, and he used these steps in a slightly different way. So, when he heard the computer read a word that he didn't know, he would look that word up by speaking the word into Siri and he would be able to get a definition for the word that way.

When using task analysis for strategies such as flashcard studying and reading comprehension, strategies that you want your peers to try and make into habits, it's important to continue to reinforce the use of these strategies. It is through practice that these strategies become comfortable and familiar to students. As a peer mentor or education coach, if you test these strategies and they are helpful to whomever you work with, then it's a good idea to make that something that you practice repeatedly. If these strategies are something that you introduce one time, it is less likely that your peers will become comfortable enough with them to continue using them without reinforcement.

Task analysis can be useful in almost anything that students do for classes. At the start of a semester, it might be important to use task analysis with new students who need it to break down instructions for procedures like logging into email, Google Drive, or the campus web platform, as these are all technological interfaces with many steps involved.

Task analysis steps are also very useful when they are accompanied by pictures, because so many students are visual learners and might benefit more from pictures as opposed to reading. When I work with students to write out instructions on how to log into their VCU email or Blackboard page, or, for example, create a blog post for a class, I take screenshots of each step in the process so that students can follow along with those pictures outside of class. Some students might not need task analysis for things like logging into email after they've practiced it enough. But task analysis can be especially useful for things at the beginning of the semester, when students are entirely new or otherwise rusty on certain procedures.

When a coach and the student that they work with are together, it's important to remember to deliver task analysis steps one step at a time, rather than all at once. Something else that I've learned when using task analysis is that, even though it does a good job of breaking down tasks to make them manageable, the sight of a full list of steps can also become overwhelming for a student.

Task analysis is great for breaking down complex projects and homework assignments for the student to follow outside of class and study sessions, but those lists of steps could also become overwhelming. To counter this, you can work with your peers to create checklists for the steps of the task. Students can cover up other steps with a sheet of paper or place them on separate pages to focus on one task at a time.

Professors also benefit from using task analysis when providing instructions for homework assignments and projects. By introducing assignments in a step by step manner, the professor makes those assignments more direct and clear. If a professor does break down assignments into steps, it's important for a peer mentor to pay attention to how specific their instructions are. Sometimes, an education coach or peer mentor can work with the student to break those steps down further, if needed.

When practiced, task analysis can be incredibly important for students with an intellectual disability to develop their independence when doing assignments and studying, as it enables them to work through tasks without relying on the constant presence of somebody else. It can be good practice for an academic support or peer mentor to always keep task analysis in mind and ask themselves, "How can we break this thing down so that it can be done more independently?"