Synthesizing Information

Sometimes, when we look for an answer to a question, it is simple. If you want to know what the weather is outside, you can look online and find the answer from one source. However, when you are solving a complex problem, creating something new, or looking for an answer to a research question, there may not be one source that addresses your needs. When this happens, you need to synthesize your findings or use synthesis.

Synthesis works by bringing together several ideas to create something new - a bit like building blocks. You may synthesize by bringing multiple pieces of seemingly unrelated information together to inspire a new solution to a problem.

Synthesis can look a little different depending on your area of study, but no matter what it is essential to answering complex questions. Let's talk about the importance of synthesis to academic, creative, and professional work!

Synthesis fits into the greater research or design process because you cannot usually find all of the information you need for a complex question in one source. While it can be frustrating to not find "the answer", it can be exciting as well.

For example, maybe you are proposing a new solution to a societal challenge. You have to locate information about its components, put your mind to work synthesizing those components, and develop the solution yourself.

Or perhaps you are analyzing a novel, and you think about other works that take place in a similar cultural or historical context. You pull together information from these works to make a claim about what something represents in the novel.

Or maybe you are reviewing multiple perspectives on an issue and you identify common themes that you then use to propose a new perspective.

No matter what, remember that as a researcher yourself, you have something to offer the process. If the answer is not out there yet, your ideas may just be the missing piece that helps develop an answer.

While this can be daunting, you may be surprised to realize that you conduct synthesis all the time in your everyday life. For example, say you are planning to go out to dinner with a friend. You start looking at reviews of local restaurants and you find a restaurant where one reviewer mentioned that the decor features local artists. You know your friend loves art, so you check the menu.

You see that the prices align with your budget, and they have your friend's favorite food. You decide that based on what you have learned from multiple sources (including your own knowledge), that this is the perfect spot! You just used synthesis!

When learning to do research for academic, creative, or professional work, we often talk about the research process.

After you identify your question, you do some background research to familiarize yourself with the topic. You notice gaps in the information that could benefit from new ideas.

You then break up your original question into smaller questions, and you gather sources that answer those smaller questions.

Next, you bring your own perspective and ideas into the context of the sources you found, and show how combining all of this information builds a new solution or perspective.

In research it's common for the process to get messy, and for you to weave in and out of these steps and even repeat some, but as long as you do all of these at some point you should be in good shape!

We hope that this overview provided you with an understanding of what synthesis is and why it is such an integral part of academic, creative, and professional work. It is an opportunity to put your own perspectives and ideas in conversation with others. It can help you gain understanding of complex ideas or come up with new solutions to complex problems.

For more insight into how to achieve synthesis in your field, reach out to an instructor, a librarian, or the Writing Center!