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SCIENCE COMMUNICATION COURSE PART III

The Core Message

Regardless of whether you want to communicate through text, pictures, video, or audio, you should always convey a clearly recognizable core message. The core message includes the essence of your entire communication, the thing that should make a lasting impression on your target audience. That is why a core message should never be too general or random, but also not include too many details. It should be as concrete as possible and be able to stand alone. But be careful! A core message is not a slogan, but a real message.

In the case of the core message, you must not lose sight of the target audience or the goal. The core message can change for the very same topic should the target audience or goal change. The language used for the core message must be clear and should not include technical terms. It should not be longer than three or four short sentences. If at all possible, each sentence should only include one piece of information.

TIP:
Begin working on your core message by narrowing down your topic and concentrating on the aspects of it that will be important and interesting for your target audience. This can be a painful process that is even referred to in journalism as "killing your darlings." The following questions can help you find your core message:

What are the problems/questions that your research deals with?
Why are these problems/questions important/interesting for your target audience?
What appears to be the solution to the problem/answer to your research question?
What is new/special/surprising about your research?

But be careful: The answers to these questions cannot be directly translated into a core message. These questions are just the ladder you need to climb on in order to get to your core message.

Example 1 – Core Message:
Here I have used a science paper from a research group from September 2020. The target audience are science reporters who follow the authors of this study on X.
https://www.science.org/doi/10.1126/science.abc5534

What is the problem/question?

Although birds are closer related to dinosaurs than to primates, they show primate like cognitive abilities. However, their brain is considered to be a relatively unstructured pile of cells. We need to find out if this is true. Only when we know how the bird's brain is organized, can we begin to comprehend why and how birds are capable of developing tools, processing complex sounds, and recognizing themselves in the mirror.

Why is this topic important for your target audience?

Science journalists are always looking for new hot topics and are especially interested in findings that tear down dogmas. They often believe that topics published in important journals with high impact factors are more important than topics in less well-known journals. In addition to that, every science editor of every media outlet knows how much their audiences are interested in brain research and animals.

What is the answer to your research question?

Some parts of the birdbrain are organized and structured like the cortex of a mammal brain: The cell bodies line up in horizontal layers while their processes form vertical columns. This discovery was possible by using a fancy new imaging technology: 3D polarized light imaging (3D-PLI).

What is new/special/surprising about your research?

For 150 years researchers believed that the bird brain was nothing more than just an unorganized pile of braincells. Our research has teared down this dogma, by showing that the bird brain has a lot of similarities with the mammals' brain, although both brains have evolved independently from each other.

The finale core message has less than 280 characters and would do well on twitter:

In our current science paper, we refute the 150-year-old assumption: Bird brains are not just an unstructured pile of cells, but similarly organized than a mammal's brain. That might explain why ravens show abilities that only primates have too – tool use for example.

Example 2 – Core message:

This time, an elementary school class is visiting the Raven Research Institute at Ruhr University Bochum for a tour:

What is the problem/question?

Ravens are especially clever. We want to find out everything we can and understand why they are so intelligent.

Why is this topic important for your target audience?

Children like animals. A well-known children's book character in Germany is "Der kleine Rabe Socke," or "Raven the little rascal" in its English version. But ravens also appear in many fairy tales and other children's books. Furthermore, children love superlatives: The biggest, smallest, fastest, most intelligent, etc.

What is the answer to your research question?

Ravens can use tools, they have a great memory and can recognize themselves in a mirror. The only other animals that can do this are humans and great apes, and the researchers at our institute were the first in the world to find this out about ravens. We were recently able to observe brain cells from ravens using a fancy high tech method. We were able to see that many parts of a raven's brain are very similar to those of humans and great apes.

What is new/special/surprising about your research?

Although ravens look very different and are much smaller than us, they can do many things just as well as we can. And their brains look like ours, too. Their brain cells are lined up in the same way as ours are. All this is extremely surprising because birds are not at all related to humans or other mammals. Their brains have evolved completely independent from our brains and somehow the result looks the same. They are not even mammals; they lay eggs.

The core message for school children:

Birds such as ravens are close relatives of dinosaurs and have almost nothing in common with us humans – except for one thing: Like us, they have a very special brain. It is quite large for such a small bird and when you look inside it looks almost like a human brain. That's why ravens can remember things really well and why they can build tools in order to find food.

TASK:

1. Choose journalists as your target audience and answer the core message questions for your topic.
2. Use these answers to create your core message. It shouldn't be more than 3-4 sentences and have no more than 280 characters.
3. Repeat the process for another target audience of your choice.