

Seven Commandments of an Experience Design Company

By Esther Hamstra

NorthernLight, based in Amsterdam, designs exhibitions from concept to installation for science centers and museums worldwide. Through huge successes and considerable failures, through research, late night discussions, and intensive visitor observation, we are starting to grasp the virtues and sins of designing what we call “platforms for lifelong learning.”

From our personal convictions and scholars' theories on learning, communication, and experience, we have developed our so-called “seven commandments.” Although the choice of words may imply otherwise, our seven commandments are not written in stone. After all, creative work cannot be done from a straightjacket of design principles. The seven commandments combine our beliefs about exhibition goals and planning, display methods, and content development, and are designed to spark discussion and inspiration within our team and to clarify our ambitions to our clients.

Survival at the Pole—co-developed by Museon in the Hague, Netherlands, and NorthernLight—combines Inuit artifacts with hands-on exhibits to show recent environmental and cultural changes in the Arctic region. Photo courtesy NorthernLight





It is all about the power of the human body and the ability to move. The body is a complex machine that can do amazing things. It is all about the power of the human body and the ability to move.

It is all about the power of the human body and the ability to move.

LITTING NAAT

46.1

GAMEA

1. THOU SHALT SPARK INSPIRATION.

Learning is more than acquiring new knowledge. The affective, social, behavioral, and psychomotor skills or outcomes for science center visitors can be just as valuable as the cognitive outcomes. Although we would applaud visitors walking away knowing Newton's three laws of motion, we are not content until visitors' happy faces show that they are associating science and technology with their own lives. To achieve this type of learning, we inspire visitors through both content and design.

Our team contains content developers who are passionate about the stories, facts, and theories of each exhibition's subject, and designers who crave to use the newest and flashiest exhibition technologies. We often have to remind each other that we are not creating for ourselves, but for the visitors. Not all content needs to be included, and some content might be better conveyed with simpler designs. We also believe that sometimes it can be worthwhile to show the beauty of a phenomenon to inspire visitors, even if they don't fully learn the science behind it. The goal is to create vivid visitor experiences that spark inspiration.

2. THOU SHALT TELL STORIES.

Storytelling contains elements—such as event sequences, personal viewpoints, and personal relevance—that make it a powerful tool for exhibiting science and technology subjects. Every subject, even sewage systems and discrete mathematics, can be brought alive with a fascinating story. For some subjects, it might feel far-fetched and strained to develop a story, yet one can be found in logical but refreshing or unusual themes.

Also, as exhibition creators, we don't have to be the storytellers. Increasingly, we use methods like inviting visitors to

help during the design process, enabling user-generated content, and letting visitors contribute to the client's research. These participative methods can give visitors ownership of their experience and create a desire to learn.

3. THOU SHALT CREATE FOCUS.

It is easy to include endless graphic panels, display hundreds of exhibits, and offer long audiovisual presentations. Such an exhibition might impress, but it would be disastrous for visitors. They would lose the will to explore it or else become too distracted to pay close attention.

To avoid overwhelming visitors, we design groups of exhibits in focused themes. Each theme has a variety of exhibit types to arouse visitors' attention. To restore their attention reserves, we create places for contemplation and rest between the themes. We can also add virtual and online layers to customize and personalize the exhibition. In these ways, we create focus to attract and keep visitors' attention.

4. THOU SHALT BE AUTHENTIC.

Why visit an exhibition with a limited amount of information when the internet supplies limitless information? Why visit an exhibition that is not accessible 24 hours a day? Why visit an exhibition at all? The answer to these questions is authenticity. By reading a book or surfing the internet, visitors can't shake hands with a robot, be overwhelmed by the size of a dinosaur, or experience the non-intuitive forces of spinning gyroscopes.

In our designs, we look for authentic ways of displaying science and technology. For example, the exhibition *High Tech Romans*, which we co-developed with Museum Het Valkhof, Nijmegen, Netherlands; LVR-Landesmuseum, Bonn, Germany; Museon, the Hague,



Netherlands; and Technopolis, Mechelen, Belgium, combines archaeological objects with hands-on exhibits and graphics of modern objects to show present-day application of technologies developed by the Romans.

5. THOU SHALT CREATE ACTION.

Our daily challenge is to design and develop the best display method to translate each topic into hands-on and minds-on experiences for active visitor engagement. Our goal is to spark visitors' curiosity and enthusiasm for the content, not for the display method. For example, augmented reality, in which real-world and virtual elements are combined in a screen image, is rapidly gaining interest as a display technology. But in some cases—like showing a vehicle's steering mechanism—visitors' curiosity might be better sparked if they interact with a life-size physical model.

Also, action is not restricted to



hands-on exhibits. Today's science centers are melting pots of exhibitions, education programs, and events, all offering opportunities for visitors to learn actively. As well as designing exhibitions, we can help science centers develop programs or events to accompany an exhibition we've created. Moreover, we always incorporate plans for social media, mobile websites, games, and apps in our proposals. We believe these tools can engage visitors before they enter a science center building and long after they leave.

6. THOU SHALT CREATE TOGETHERNESS.

Exhibits can easily be designed for a single visitor, but this pitfall neglects the fact that most people visit a museum in a group, whether with friends, family, or schoolmates. Even a visitor exploring an exhibition as an individual is probably not alone in the hall and might encounter other visitors or explainers. Social interaction is an important contributor to learning, so we design exhibits and activities that enable or facilitate interaction.

7. THOU SHALT HAVE LOVE AND PASSION FOR THE VISITOR.

Many exhibitions, unfortunately, have been made to impress curators, sponsors, directors, or other designers. In contrast, we try to design exhibitions with love for the potential visitors. People from all corners of the world visit the exhibitions we develop, so understanding the audience's demography, interests, expectations, and cultural background is critical for creating effective exhibitions. The thrill of observing visitors at an exhibition's opening and discovering that they share the passion we have put into the exhibition is beyond compare. The opening of an exhibition is not the end of its creation; it is the beginning.

We believe that taking these seven commandments into account can help in the design and development of physical as well as social platforms that stimulate lifelong learning. We aim to develop experiences that not only affect visitors as they view an exhibition, but also inspire them to learn more about science and technology and how it can benefit them. We want visitors to build on their experience long after their visit to a science center. ■



Top: NorthernLight worked with Hidrodoo in Herentals, Belgium, to create this outdoor water garden, which offers open-ended exploration through interactive exhibits. Photo courtesy NorthernLight
 Bottom: *High Tech Romans* is meant to spark enthusiasm for innovation by combining real archaeological objects with hands-on exhibits and graphics of modern objects. Photo © Bart Nijs

Esther Hamstra (hamstra@northernlight.nl) is content manager at NorthernLight, the Experience Company, in Amsterdam, Netherlands.