

Joint Ways and Means Committee  
For McKenzie River Discovery Center

**” Interactive Education Creates Memorable Experiences”**

Co-Chairs Betsy Johnson, Elizabeth Steiner Hayward and Dan Rayfield, Co-vice chairs and members of the committee. Thank you for this opportunity.

I am Randy Dersham. I'm the Creative Director for the McKenzie River Discovery Center. I have had a career in interactive entertainment for over 30 years and have been the designer and executive producer for several large online entertainment worlds. It has been a tremendous blessing to have a career where I am able to use PLAY to engage the mind for entertainment and education. That is exactly what we will do at the MRDC.

Today a new trend is happening in museum and interpretive centers where digital technology is being used inside buildings. Visitors can walk into a man-made space that emulates the real world. At the MRDC the Salmon spawn year-round, cultural history comes to life and the volcanic formation of the High Cascade Range, which stores immense amounts of underground water, can be watched or even altered.

What the McKenzie River Discovery Center will bring to Oregon is emerging educational technologies and entertainment used to demonstrate the importance of the McKenzie River and its resources. I've explained a few of these technologies below. The common thread is that a custom educational experience is built with software which creates an experience in a large physical space. Each physical exhibit at the MRDC is controlled by a computer while the core educational experience is created by the software. Once the MRDC is built, changes and updates can be made to this content at a fraction of the original cost. The MRDC will be interactive, educational, and continually changing.

Some of the new technologies and how they may be used:

**Virtual Reality:** These are whole digital worlds that are created in software that can be seen within a headset or inside a video wall room. The visitor can look in any direction to experience and interact with this world.

**Augmented Reality:** This is software that uses glasses or a small handheld device like a pad where the pad/glasses camera displays a real looking object or animal onto a real-world space. If you build a diorama then the pad can display people or animals in that space.

**Small Ride Technology:** A platform can be set on hydraulic movement arms that are controlled by software. That platform could be a boat. The visitor gets in the boat, puts on the Virtual Reality headset and can take a safe but realistic ride through white water rapids.

**Interactive Video Walls/Floors:** The world doesn't need to be only inside the headset. By using new laser projectors, realistic images can be projected, and touch technology will allow visitors to interact with the projection. Imagine a pond projected onto a floor. Visitors can walk on the pond, splash water and chase fish.

**Interactive Tabletop:** Similar to the projection above but table sized. This is the mainstay of interactive educational space. Imaging a dining room with 4 to 8 seats with a table sized screen that is touch enabled. This is a giant iPad with almost unlimited possibilities for interaction with things in the table and/or with others at the table.

Thank you for your time and your support,  
Randy Dersham