# Interactive Technologies in Museology and Education

### Kivanc Cubukcu – Reo-Tek NAMES - 2014



# **ING BX**

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- stems stems



# ADOUT REO-TEK



Interdisciplinary team about 20 people Develops interactive technologies for museums, schools and for ulletentertainment



# First Turkish 3D Scanner Software and Hardware - 2005



### Purpose of digitazitation of cultural heritage





# First Turkish Interactive Floor Projection - 2005



#### Interactive floor projection at Antep Zeugma Museum



# Kaman Kalehoyuk Archelogical Museum – 2010



Ancient City Reconstruction and Tour



# Interactive Systems



Output generated by user input.

# Interactive Systems





### Principles of light





### Principals of a dynamo system





### Principals of a pulley

#### Principals of a tornado



# Why Interactive?



### Interactive learning is parcipitant

# Why Interactive?

### Interactive learning has higher long-term impact





# Why Interactive?



### Interactive learning is so much fun!!!



# Why Digital Interactive?



#### Less space, more info



# Why Digital Interactive?



#### It's an everyday activity



# Why Digital Interactive?



#### Less risk than physical interactive systems



# Our Interaction Philosophy





#### INPUT



### CONTENT

#### OUTPUT



# Goals of Digital Interactive Systems



#### Inform the visitor

#### Marsyas Heykeli

Marsyas, bir Satyr'dir. Satyrlerin, genelde gövdelerinin üstü insan şeklinde, altı ise keçi ayaklı olarak tasvir edilmiştir. Ancak burada Marsyas, tamamen bir insan vücuduyla gösterilmiştir. Marsyas, tiyatronun sahne binasının ikinci katında tanrılarla birlikte yer alır.

#### Statue of Marsyas

Marsyas is a Satyr. Satyrs are generally depicted with human upper body and goat legs. In this statute, however, Marsyas is depicted with a complete human body. Marsyas is placed on the second floor of scene together with the other gods.



# Goals of Digital Interactive Systems



#### Create an enjoyable experience



## Informative Interactive Systems



### Inform the visitor with the least boring way possible

#### Agora

Kentin ticaret merkezidir. Doğu Balı aksında uzanan portikoları İyon tarzında inşa edilmiştir. Güney agora ortasında 260 metre uzunluğunda bir havuz yer alır.

#### Agora

The trade center of the city. The porticos, which lay on the east-west axis, were build in Ionic style. There is a pool in 260 m. length placed at the center of southern agora.

#### www.reo-tek.com



# Game-Like Interactive Systems



More scenario oriented, have gamification



# Large Scaled Interactive Systems



Less informative, more immersive



# Hybrid Interactive Systems



Both large-scale and informative



# Future of Digital Interactive Systems





# Tangible Systems



Tangible system teaching chemical bonding

![](_page_26_Picture_4.jpeg)

# Virtual Reality Systems

![](_page_27_Picture_1.jpeg)

### Oculus Rift VR glass

![](_page_27_Picture_3.jpeg)

## Augmented Reality Systems

![](_page_28_Picture_1.jpeg)

#### Google Glass in an art museum

#### Stop 7 - Other content: 1 Video The house of Van Gogh in Provence

Tap to watch the video

![](_page_28_Picture_5.jpeg)

## Indoor Tour Systems

![](_page_29_Picture_1.jpeg)

Indoor navigation systems and museum advisor

![](_page_29_Picture_4.jpeg)

![](_page_30_Picture_0.jpeg)

# Thank You

![](_page_30_Picture_2.jpeg)