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Oral Roberts University – 3Dream Studios



Reaching the Students in the World through Global Collaboration

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Flipping the University with AVR to reach students



It Truly is a Digital Frontier

What is
AVR



Definitions – Flipped Classroom

Flipped classroom is an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside of the **classroom**. It moves activities, including those that may have traditionally been considered homework, into the **classroom**.



Definitions – Flipped University

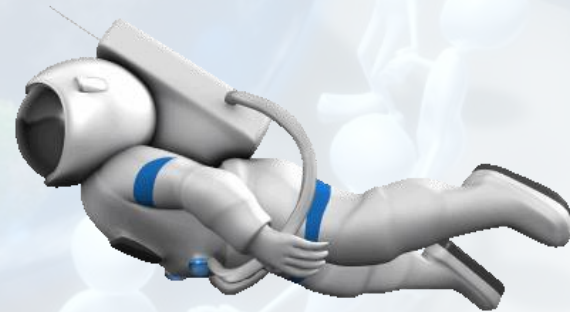
Flipped University is an educational model that leverages the best of 'fluid' technology, and education to meet the needs of a 'fluid' world from one central location. OneCampus™ that is flipped around the world for the betterment of humanity.



The Internet of ...

The internet of things (IoT) will go down in history as the worst name ever given to technology. The Internet is truly about people, so it should carry a more fitting label such as the Internet of freedom, the internet of dignity, the Internet of light, the Internet of people – not the Internet of Things.”

~ Michael L. Mathews, United Nations, April 2016





Flipping the University Around the World

Purpose and Design

Virtual Reality Education System (VRES)

A Micro-innovation for the future SmartCampus

All Realities

Augmented, Virtual, Panoramic, 360 Degree, Blended, Avatars, etc.



All Programs

Taking all Realities in Educational Media and making them seamless, accessible, and searchable across all online programs and courses.

Filter by

| | | |
|----------------------|--------------------|----------------------|
| Bachelor's Degrees | Behavior Health | Format (AR, VR, 360) |
| Masters Degrees | Business | Word |
| Certificate Programs | Criminal Justice | Topic |
| Doctoral Degrees | Communication | Subject |
| Programs by College | Cyber Security | Language |
| Programs By Industry | Nursing and Health | Media Type |
| All Online Programs | Phycology | Course |
| All | Technology | Date added |
| | Etc. | |

All Devices

Allowing all new realities to be used on all personal, group, and classroom devices



Integrated Across All Systems

LMS, Student Information System, Career Planning, Customer Relations System



Integrated Across all Emerging Technologies

Pathway to future success leveraging all technologies in a unified manner.



For Demo
Text “go” to (918) 716-9030

**Virtual
Reality
Education
System**



Global Learning Center Purpose

- 1** Develop a Global Lens and Expanded Culture at the Tulsa Campus
- 2** Increase Global Learning Opportunities for ORU Students Around the World
- 3** Intensify International Recruiting Efforts
- 4** Create and expand a Proprietary Whole Person Distance Education Model
- 5** Form New Partnerships with Significant Educational and Ministry Institutions Globally through Collaborative Access Education
- 6** Use New Technologies and New Paradigms to make Spirit-Empowered Whole Person Education Accessible to Millions
- 7** Plant ORU on Every Inhabited Continent by 2025

Fulfill the Vision and Mission of Oral Roberts University as planned in the Globalization Case Statement and University Adaptive Plan.



GLC Design Concept

- Multi-purpose functionality in all rooms to increase reach and utilization.
- 100% license access for all ORU students, faculty, and staff around the world.
- Five year partnerships for a five year sustainable model.
- Simplicity and 'cable-free' for global reach (fluidity).



Why you should approach “fluidity” in mobile technology—because miracles can happen

BY MIKE MATHEWS
January 26th, 2018

Oral Roberts University has figured out how to use technology to truly transform the student experience

Functionality and Capacity



Global Learning & Teleportation
Classroom



Studio Classroom



Virtual Reality Classroom



High Performance
Computing Research
Classroom



Global Innovation Collaboration
Classroom



Distance Education Lab Classroom



Instructional Class for Disabilities



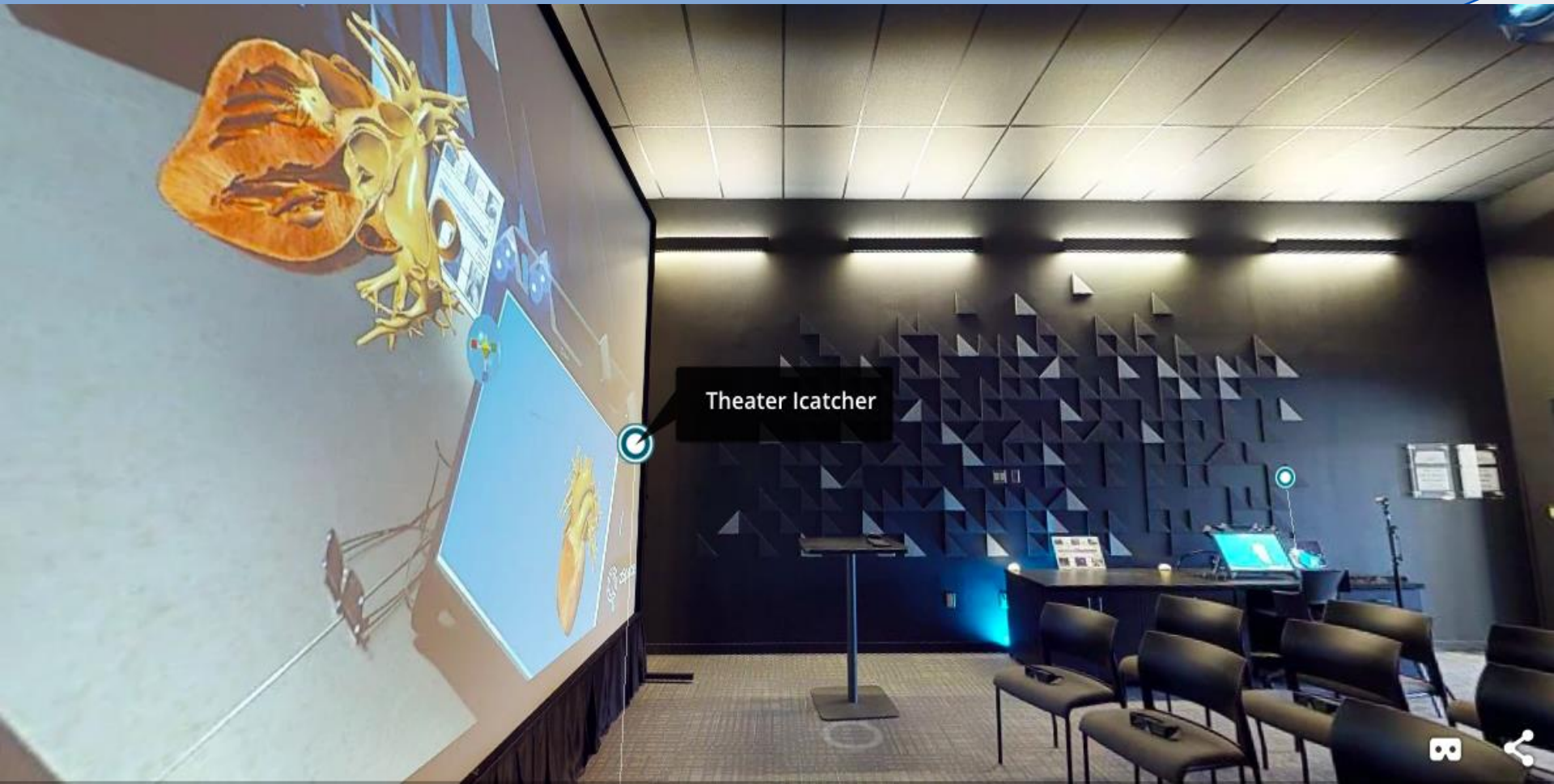
Faculty Excellence and Learning
Classroom

10 class rooms, six distance education rooms, one multiple purpose room with seating for 750, one recording studio, one AVR Lab, one AVR programming room; 12 offices, four conference rooms, two greenrooms and one make-up room.

GLC Interactive View - Classrooms



GLC Interactive View - AVR



AVR Design Concept

Simplicity – Phone to Dome Solution

AVR and Immersive Systems



Mobile



Mobile AR



Zeiss glasses



Cardboard



Oculus Rift



PC



EON Idesk



EON Ibench Mobile



EON Holopodium



3D TV



EON Interactive Mirror



EON Ibench



EON Holographic I



EON Icube Mobile



EON Icube Compact



EON Idome Mobile



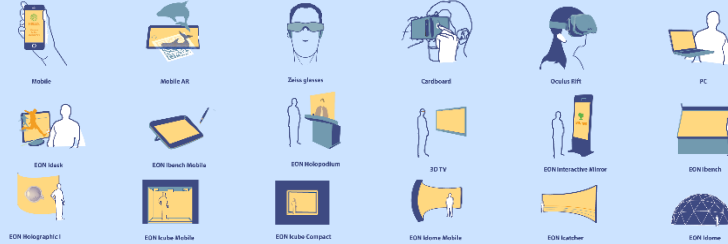
EON Icatcher



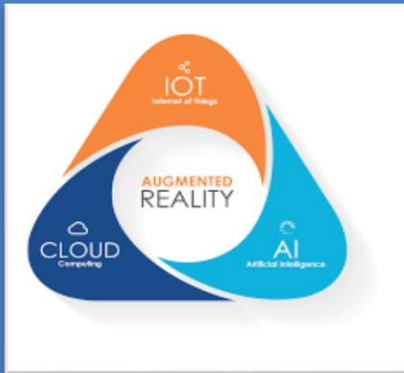
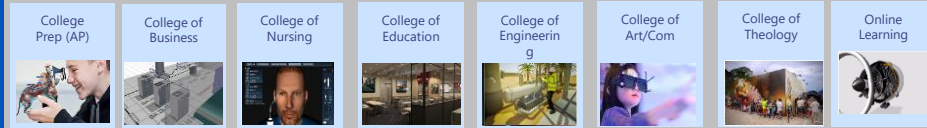
EON Idome

AVR COMPREHENSIVE DESIGN

INTEGRATED SYSTEMS – PHONE TO DOME



EDUCATION SPECIFIC LIBRARY AVR SOLUTIONS





IMPACT AND PROGRESS

The Measurements of Student Success

| Category | Pre-AVR (2016) | Post AVR (2018) |
|---|----------------|-----------------|
| Placement of International students | 85% | 99.9% |
| Placement of all students | 92% | 99.4% |
| Online Enrollment | 385 | 625 |
| Traditional Enrollment | 3,460 | 4,000 |
| Certificate Enrollment | 300 | 2,230 |
| Student Retention (measured Fall Freshman to Spring Freshman) | 73% | 92.6% |
| Student Satisfaction Survey | 90% | 98% |
| Faculty technology engagement | 65% | 95% |
| Access to AVR Learning Environments | 40 | 300,000 |
| Number of Countries Reached | 89 | 106 |

One Year Impact and Progress

- 88,000 visitors and students have come to see, touch, and taste the experience of reaching around the world with new technology paradigms in education.
- 320 faculty members trained on effective use of the technology and features.
- Students from 101 countries exposed to the new technologies; each student having smart phone access to augmented and virtual reality, and global zoom connections.

One Year Impact and Progress

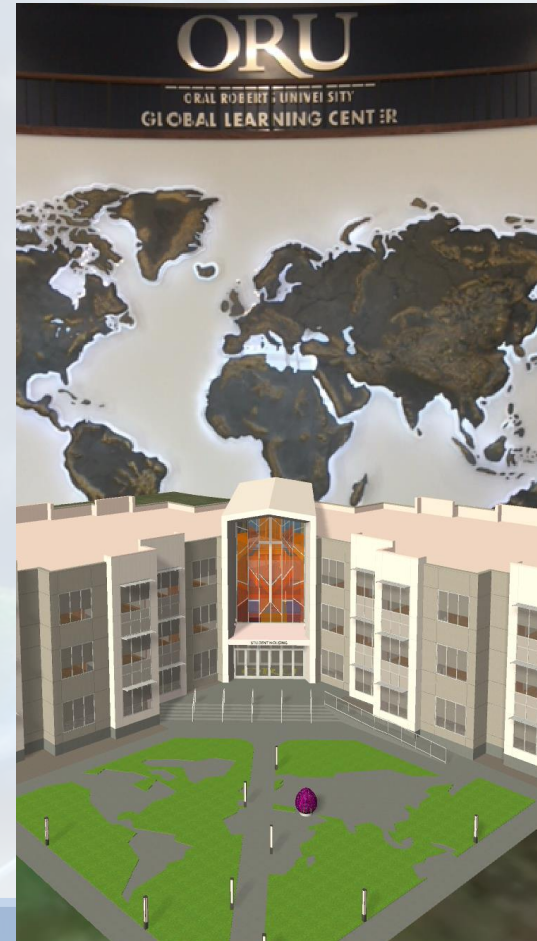
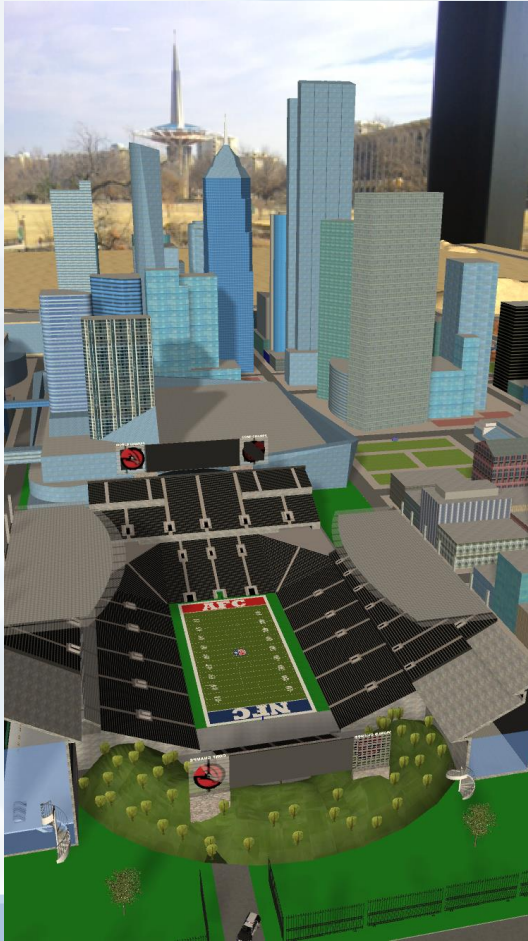
- Ten additional countries reached in new methods with the technologies; including Pakistan, Singapore, Ecuador, India, Bulgaria, Saudi Arabia, Norway, Brazil, Tanzania, and Russia.
- Over 800 students and guest lectures piped-into the GLC from around the world.
- Students creating their own AVR and Avatar learning environments.

One Year Impact and Progress

Students attending 65 different classes hosted in the GLC. Classes include...

- Theology
- International Business
- Pre-Med, Biology, Physics
- Engineering
- Nursing
- Sports Management
- Finance
- Business
- Journalism and communications
- AVR Programming

Student Designs in AVR



One Year Results and Progress

- Twenty five faculty members have transitioned their teaching styles to enhance the learning experience within the GLC.
- Three courses completely redesigned around the GLC capabilities.
- 5% increase in grades by students who have been tested in the same class using AVR vs. not using AVR.
- Students are creating their own VR experiences as their mid-term and final tests.

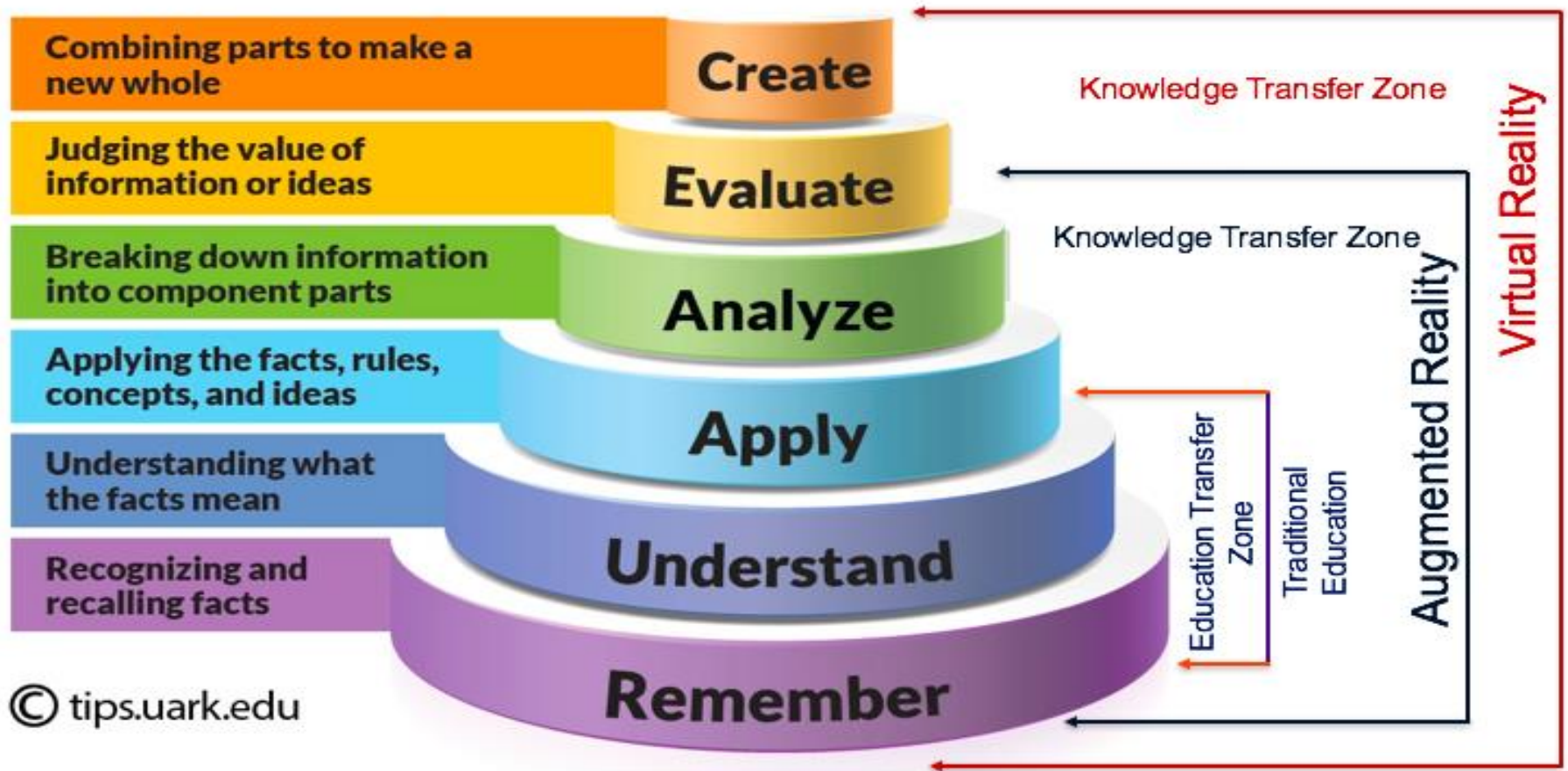
One Year Results and Progress

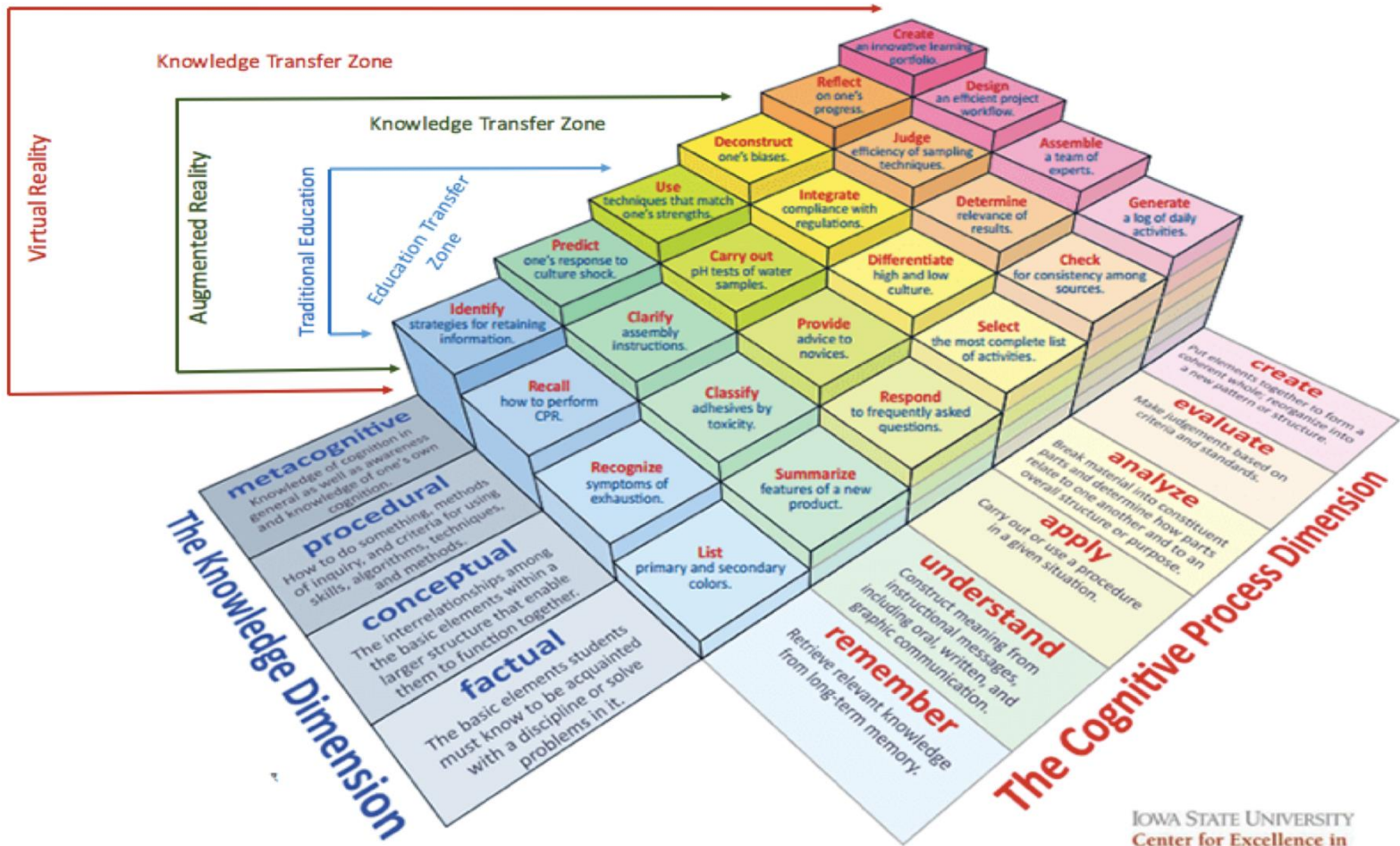
- Parents and prospective students are quicker decision makers about their college choice – when being exposed to the GLC.
- ORU has set the bar of 'education transformation' with AVR as a key component of education, teaching, learning, and career readiness.
- ORU has achieved thirty publications and magazine articles on defining the future of education through the GLC.
- ORU has won eight state and national education and leadership awards on the outcomes of the GLC.
- The national awards have earned ORU key spots in the USA Today and Chronicle of Higher Education.



Transforming Education

AVR First Technology to achieve Blooms Taxonomy





ORU ADVANCES INTO THE DIGITAL FRONTIER

INTERACTIVE, AUGMENTED AND VIRTUAL REALITY EDUCATION

ORAL ROBERTS UNIVERSITY stands at the alert and on the frontier of a new dimension of education. Within the walls of the Global Learning Center (GLC), dedicated January 11, 2017, students experience some of the most advanced

educational media available. We are still living on the frontier in Oklahoma; we are not afraid. Our face is to the future; our faith is strong. Using Virtual Reality and Augmented Reality technology our students are not only studying in

textbooks, they are experiencing learning in real ways, and drawing on the wealth of knowledge literally from around the world, right here in Tulsa. They will leave this university equipped at the very highest levels of their profession.

"Using new technologies and new paradigms to make Spirit-empowered whole person education accessible to millions is the vision behind this new building."

-Dr. William M. Wilson
President of Oral Roberts University

ENGINEERING STUDENTS

PHYSIOLOGY STUDENT

BIOLOGY STUDENTS



Interacting with a virtual 3D engine

creating a virtual 3D person

studying virtual 3D eye anatomy

GLC Dedication 2017



A NEW FRONTIER OF LEARNING



ORAL ROBERTS UNIVERSITY is establishing a new frontier of learning. Using D2L technology in innovative ways, ORU is nurturing the spirit, mind, and body of its students, paving the way for greater learning success.

Using Insights from the D2L learning management system, ORU can predict student performance. By intervening earlier ORU can help students breakthrough their individual learning barriers, boosting retention rates by more than 75%.

Using in-classroom advancements such as video recordings, and virtual and augmented reality, delivered through the Brightspace LMS, ORU is able to create a highly personalized online educational experience.

TO THE UTTERMOST BOUNDS OF THE EARTH **ORU**
For more information about Oral Roberts University visit www.oru.edu or call 918-495-6161.



For more information about innovative learning technologies, visit D2L.com/ORU or ORU.edu.



Online Education



... CEO
Schwartz
... how
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Demand for Choice and Diversity in Online Learning Creates Innovation

Although online education has been around for many years, the demand for a collaborative and engaging learning environment has led to diversity in online programs.

The United States Distance Learning Association, or USDLA, is honored to participate alongside other people and organizations that represent online learning. The USDLA was formed in 1987 and is celebrating 30 years. Over that time, we've been consistently carrying out our mission of supporting the development and application of distance learning. We represent the community across a variety of constituencies that includes pre-K-12, higher education, continuing education,

corporate, military and government, home schooling and telehealth both nationally and internationally.

Evolution of online education
Like the USDLA, online education has been in existence for decades. Its earliest form dating all the way back to the 1960's with linked computer terminals at the University of Illinois. As the digital age progressed from the mid 1980's through the early 90's, so did the adoption of online learning. It's now effectively mainstreamed with more than a quarter of stu-



Ken Conn
2017 President, United States Distance Learning Association, Director Partnerships & Collaboration, i2 Technologies

dents taking at least one online course. As an increase in online learning continues, the familiarity with it becomes more of a common practice. Online learning is producing some interesting outcomes, particularly when it comes to innovation.

The online generation

A new generation of students, who have grown up in a world that has always included online learning, is challenging the way things have been done and why they continue to operate that way. At the same

time, technology continues to provide our lives with flexibility while keeping us increasingly more connected. This allows us to focus on what's really important — interaction, relationships and community. We want those same things in our learning environments as well. We want collaborative and engaging environments where we can interact with people and information at any time, in any place, at any pace and with a device of our choosing. The demand for more choice and diversity across the board has understandably arrived. ■

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PLEASE RECYCLE AFTER READING

36 million adults in the U.S. have limited English or reading skills and more than 60 million can't perform simple math.

65% of all jobs in 2020 will require some level of postsecondary education.

Low-skilled adults are:
2x more likely to be unemployed
3x as likely to be in poverty
4x as likely to be in poor health
8x as likely to be incarcerated

A person with a high school diploma or equivalent earns an average of \$9,620 more per year than a non-graduate.

We are the adult education system of nearly 35,000 leaders, administrators, and educators preparing adults to succeed in a global culture and economy by delivering a world-class education.

www.educateandelevate.org

Adult Education is the solution to these problems.

ORU

Oral Roberts University's Global Learning Center has hosted over 60,000 site visitors and reached people in 95 areas around the globe through teleportation and virtual and augmented reality.

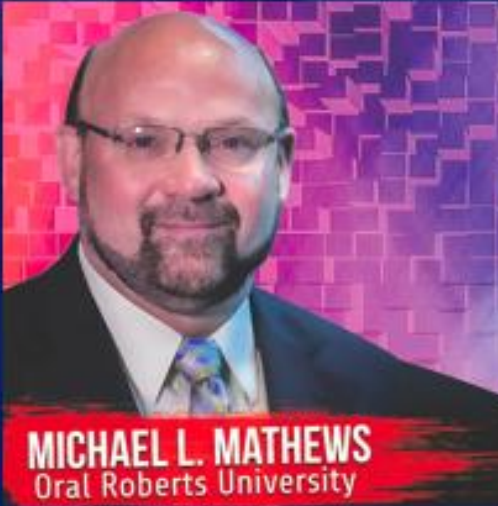
Through leading edge technologies at the Global Learning Center ORU reaches into every persons world including a recent effort of helping flood areas through operation Hope4Homes.

Proud winners of the 2017 Innovation in Higher Education Award by the United States Distance Learning Association!

Learn more about the Global Learning Center's partnership with Operation Hope for Homes in Events Trending at oru.edu.

2017 INNOVATION IN HIGHER EDUCATION AWARD

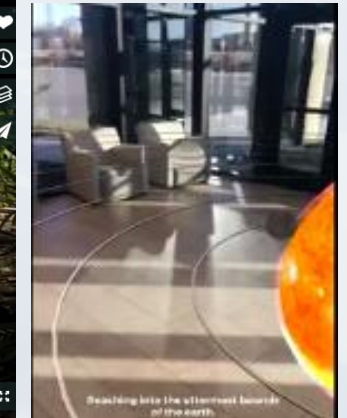
Global Awards





Samples of AVR

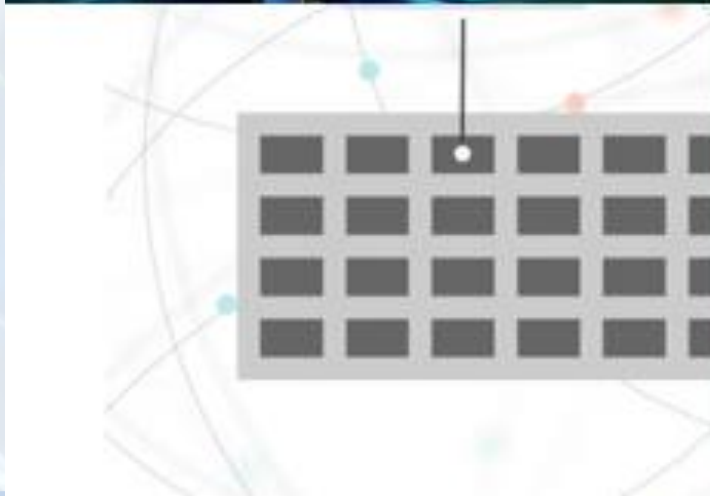
AVR Demonstration





Future Possibilities

Global Travel into Virtual Worlds with AI





Questions and Answers

