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2016

PREPARING FUTURE READY STUDENTS

Minecraft: Learning Reimagined

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MINECRAFT: LEARNING REIMAGINED

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WHY ARE YOU HERE?

You already use Minecraft in the classroom

- Preach
- Learn something new

You want to use Minecraft

- Preach
- Learn something new
- How to setup

You are debating to use Minecraft

- Preach
- Learn something new
- How to setup
- ????

Other

- Really...some teacher is letting students use Minecraft...is he crazy?!?!?

Something is missing?

- Why use Minecraft?
- Is Minecraft an effective learning tool?
- Assessment?

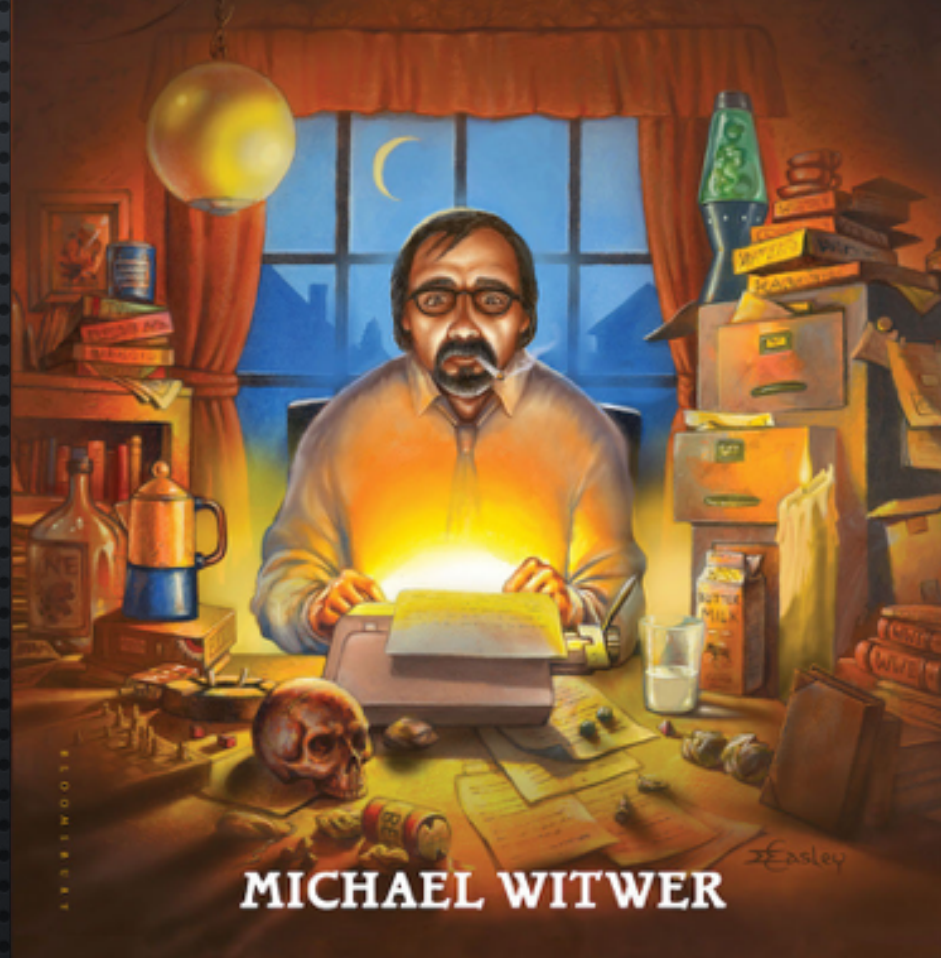
A long time ago....

A LITTLE BACKGROUND....



Empire of Imagination

GARY GYGAX and the BIRTH
of DUNGEONS & DRAGONS





You have died of dysentery.

2
3
4
5



Locked!

B GEMASTER
SERIES

LATERS AGES 12-ADULT

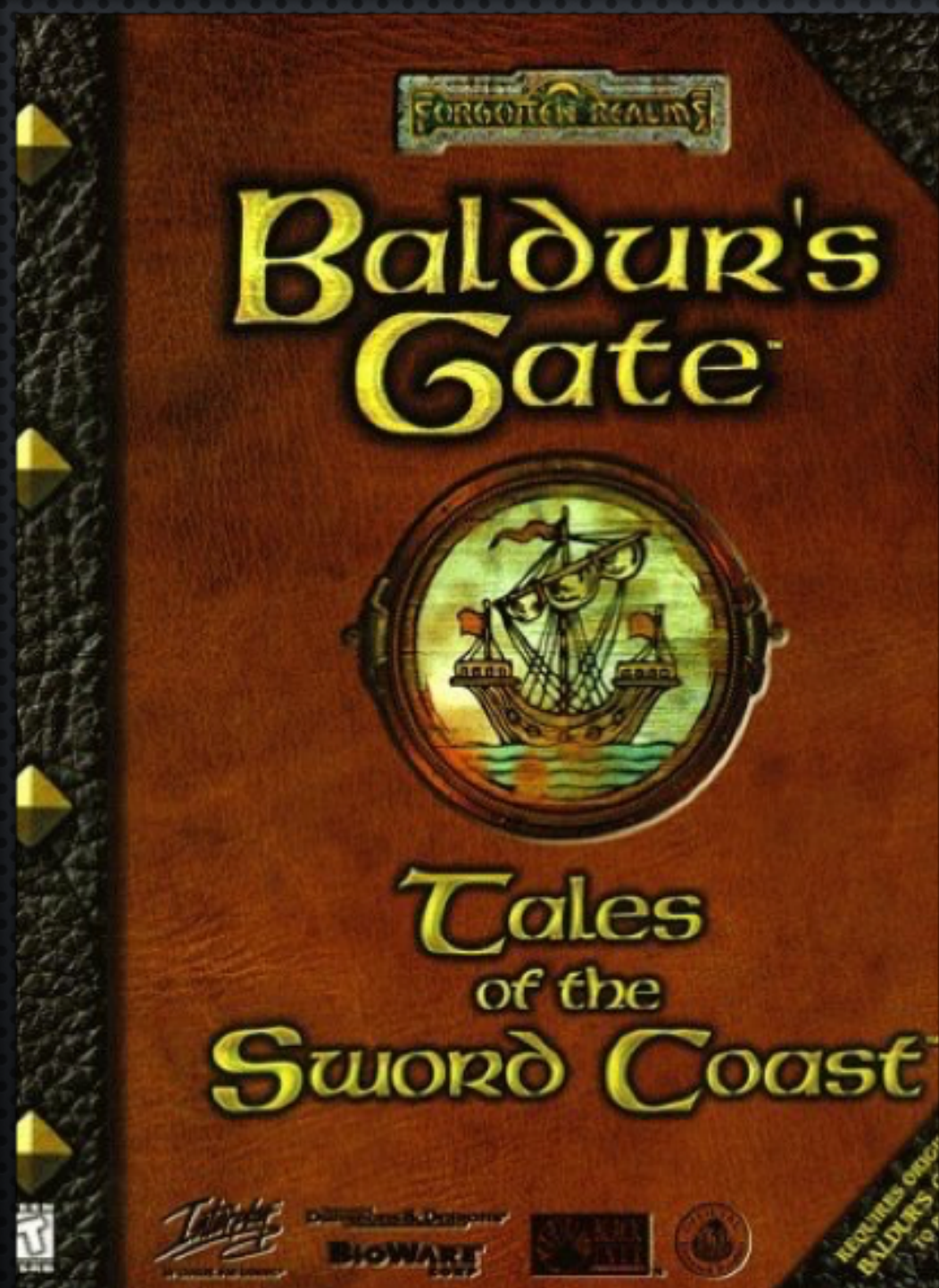
GAME OF
H ADVENTURE

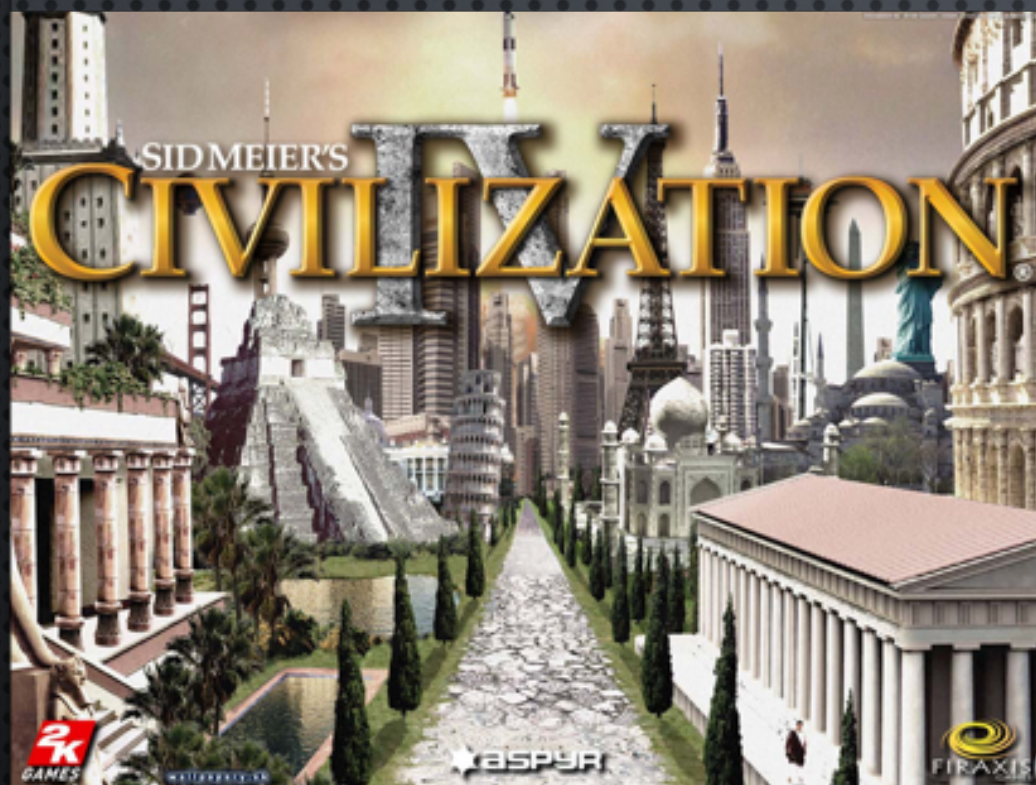
At Spring, they
on. The world of our
always. (Mention your country, managed your
and attack the enemy on land, sea and air.)

CRONON FOR DETAILS

Axis & Allies









MINECRAFTEDU



WHAT DO THESE GAMES HAVE IN
COMMON?

JEN GROFF - MIT MEDIA LAB

- 7 ESSENTIAL PRINCIPLES OF INNOVATIVE LEARNING [LINK](#)



ORGANIZATION FOR ECONOMIC COOPERATION
AND DEVELOPMENT (OECD) LAUNCHED THE
INNOVATIVE LEARNING ENVIRONMENTS

7 Principles of Learning

1 Learners at the center

The social nature of learning

2

3 Emotions are integral to learning

Recognize individual differences

4

5 Stretching all students

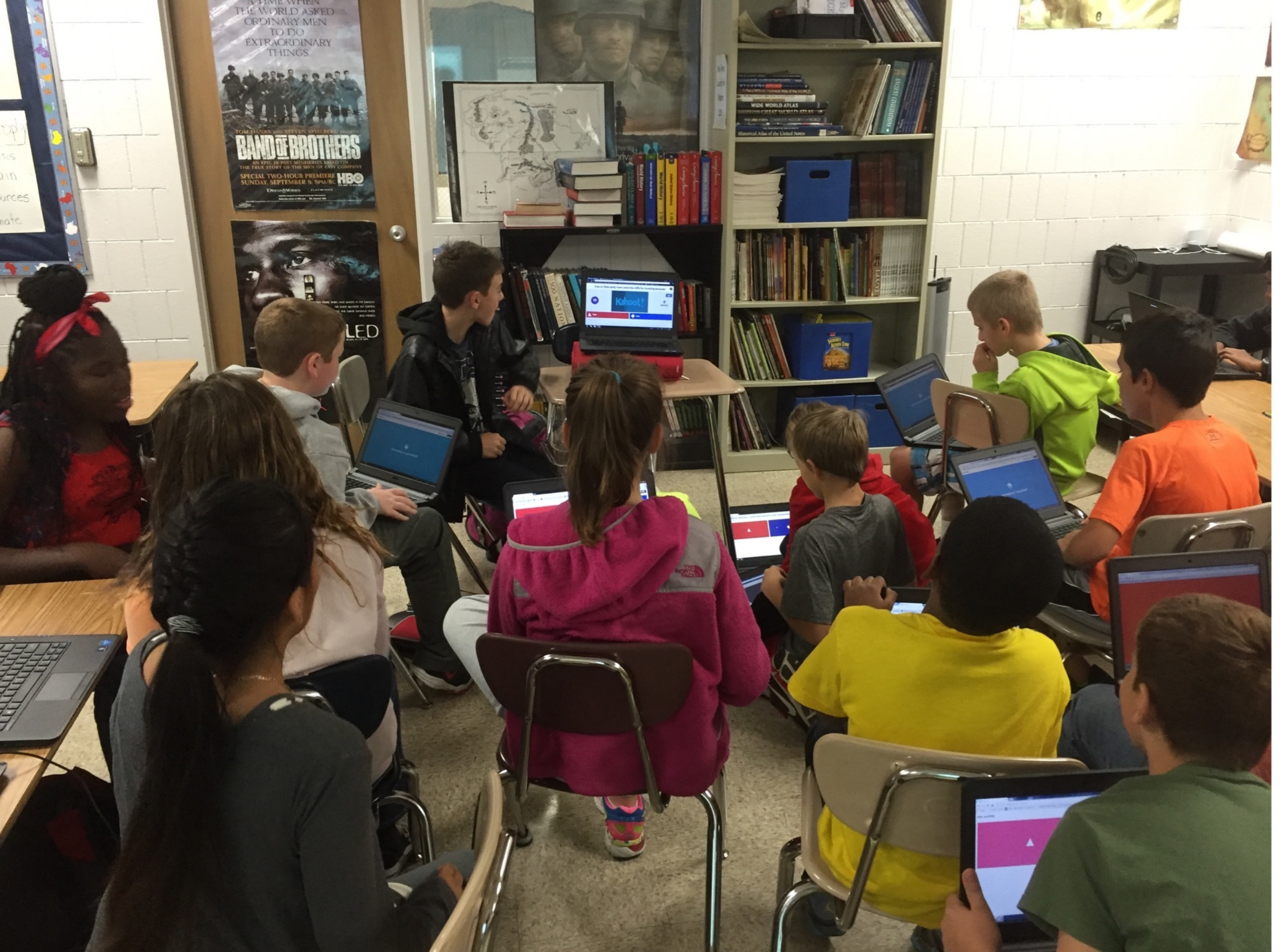
Assessment *for* learning

6

7 Building horizontal connections

LEARNERS HAVE TO BE AT THE CENTER OF WHAT HAPPENS IN THE CLASSROOM

- WITH ACTIVITIES FOCUSED ON THEIR COGNITION AND GROWTH. THEY HAVE TO **ACTIVELY ENGAGE IN LEARNING** IN ORDER TO BECOME **SELF-REGULATED LEARNERS** WHO ARE ABLE TO CONTROL THEIR EMOTIONS AND MOTIVATIONS DURING THE STUDY PROCESS, SET GOALS, AND **MONITOR THEIR OWN LEARNING PROCESS**.



LEARNING IS A SOCIAL PRACTICE AND CAN'T HAPPEN ALONE

- “BY OUR NATURE WE ARE SOCIAL BEINGS AND **WE LEARN BY INTERACTING**,” GROFF SAID. “WE LEARN BY PUSHING AND PULLING ON CONCEPTS WITH ONE ANOTHER.” **STRUCTURED, COLLABORATIVE GROUP** WORK CAN BE GOOD FOR ALL LEARNERS; IT PUSHES PEOPLE IN DIFFERENT WAYS.



EMOTIONS ARE AN INTEGRAL PART OF LEARNING

- STUDENTS UNDERSTAND IDEAS BETTER WHEN THERE'S INTERPLAY BETWEEN EMOTIONS, MOTIVATION AND COGNITION, SO POSITIVE BELIEFS ABOUT ONESELF ARE A CORE PART OF REACHING A MORE PROFOUND UNDERSTANDING.



LEARNERS ARE DIFFERENT

- AND INNOVATIVE **LEARNING ENVIRONMENTS REFLECT THE VARIOUS** EXPERIENCES AND PRIOR KNOWLEDGE THAT EACH STUDENT BRINGS TO CLASS. “YOU REALLY WANT PRACTICES AND PROCESSES THAT HELP TEACHERS ENGAGE EACH STUDENT WHERE THEY ARE,” SAID GROFF. THIS PRINCIPLE IS UNDERSTOOD BY EVERY FRUSTRATED EDUCATOR TEACHING TO **A “MIDDLE” THAT DOESN’T EXIST.**



STUDENTS NEED TO BE STRETCHED, BUT NOT TOO MUCH

- “IT’S REALLY CRITICAL TO FIND THAT STUDENT’S SWEET SPOT,” GROFF SAID. EDUCATORS SHOULD TRY TO PREVENT BOTH COASTING AND OVERLOADING. STUDENTS NEED TO EXPERIENCE BOTH ACADEMIC SUCCESS AND THE CHALLENGE OF DISCOVERY. IN A DIVERSE CLASSROOM GROUP WORK CAN HELP ACHIEVE THIS AS STUDENTS AT DIFFERENT LEVELS HELP ONE ANOTHER.





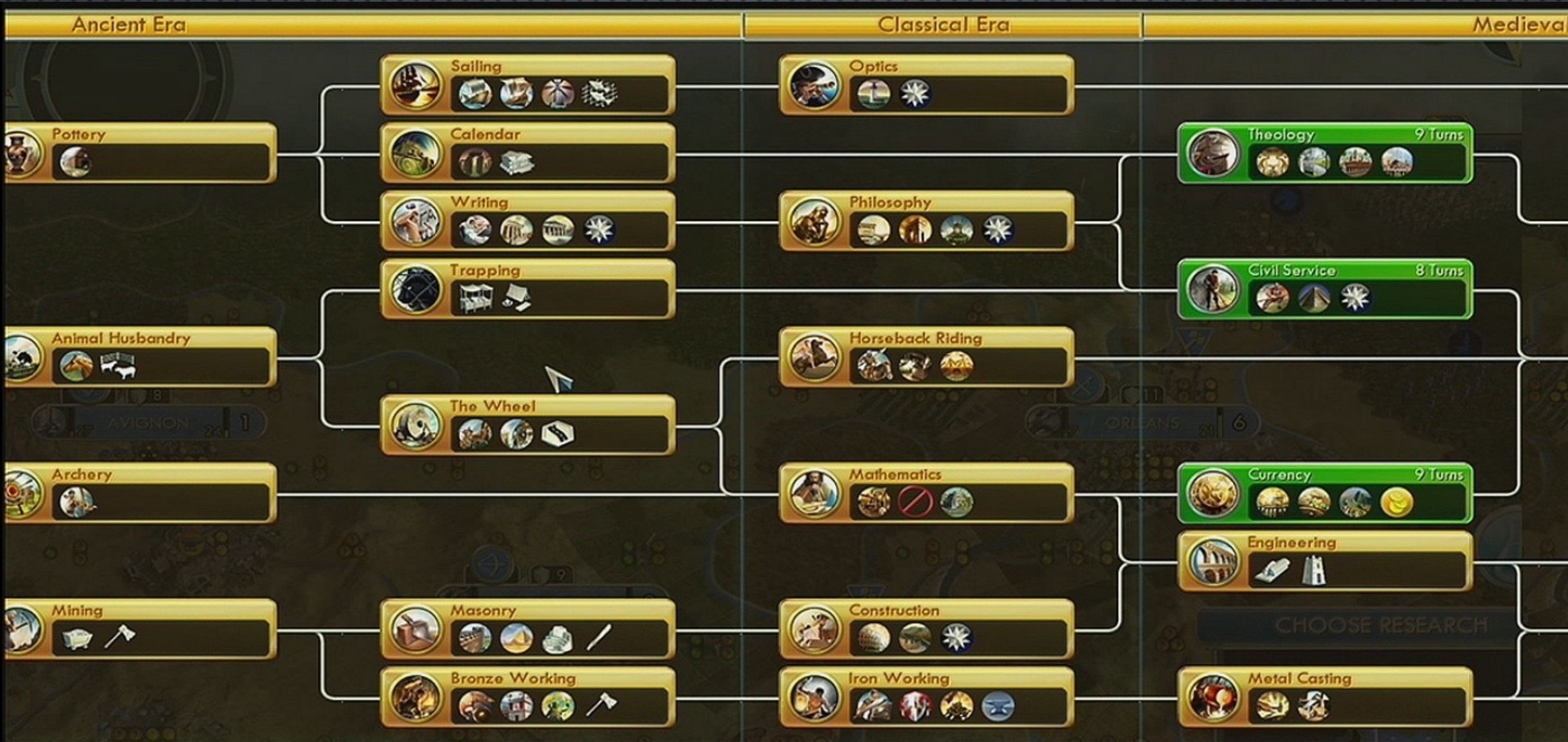
ASSESSMENT SHOULD BE FOR LEARNING, NOT OF LEARNING

- ASSESSMENTS ARE IMPORTANT, BUT ONLY TO GAUGE HOW TO STRUCTURE THE NEXT LESSON FOR MAXIMUM EFFECTIVENESS. IT SHOULD BE MEANINGFUL, SUBSTANTIAL, AND SHAPE THE LEARNING ENVIRONMENT ITSELF. “GOOD TEACHERS DO THIS INFORMALLY MOST OF THE TIME,” GROFF SAID. “BUT WHEN IT’S DONE WELL AND MORE FORMALLY IT’S A WHOLE STRUCTURE AND METHODOLOGY WHERE YOU COLLECT FEEDBACK ON THE LEARNING PATHWAY AND IT DRIVES THE NEXT STEP THAT YOU TAKE.”



LEARNING NEEDS TO BE CONNECTED ACROSS DISCIPLINES

- AND REACH OUT INTO THE REAL WORLD. LEARNING CAN'T BE MEANINGFUL IF STUDENTS DON'T UNDERSTAND WHY THE KNOWLEDGE WILL BE USEFUL TO THEM, **HOW IT CAN BE APPLIED IN LIFE**. UNDERSTANDING THE CONNECTIONS BETWEEN SUBJECTS AND IDEAS IS ESSENTIAL FOR THE ABILITY TO TRANSFER SKILLS AND ADAPT. **"WE CAN'T JUST HAVE THINGS REMAIN IN SILOS THAT NEVER INTERACT,"** GROFF SAID.



MINECRAFT EDUCATION EDITION

WITHIN THE WORLD OF
GAMING, MINECRAFT IS
SPECIAL IN FOUR WAYS:

1. THE MINECRAFT EXPERIENCE IS ABOUT GATHERING AND BUILDING WHATEVER YOU CAN THINK OF; IT IS A TOOL OF PRODUCTION AT IT'S CORE.



1. IT'S ALSO BUILT WITHOUT A STRUCTURE OR SCAFFOLDING THAT FORCES CERTAIN KINDS OF EXPERIENCES. IT TRUSTS THE PLAYER TO THINK.



3. MINECRAFT IS SOCIAL AND IS APPEALING
BECAUSE YOU CAN PLAY WITH YOUR FRIENDS.



4. THE INNER GUTS OF MINECRAFT ARE WIDE
OPEN TO LEARNING MORE ABOUT
PROGRAMMING.

MINECRAFT NOTE BLOCKS - QUEEN BOHEMIAN RHAPSODY



HOW IS MINECRAFT BEING USED WITHIN
DIFFERENT SUBJECTS?

MATH



MATHCRAFT: FRACTIONS ON A NUMBER LINE

SCIENCE



THE DIGESTIVE SYSTEM IN MINECRAFT

LANGUAGE ARTS



TEACHER'S GUIDE: FIVE WAYS MINECRAFT (AND OTHER VIDEO GAMES) CAN BOOST STUDENT WRITING SKILLS

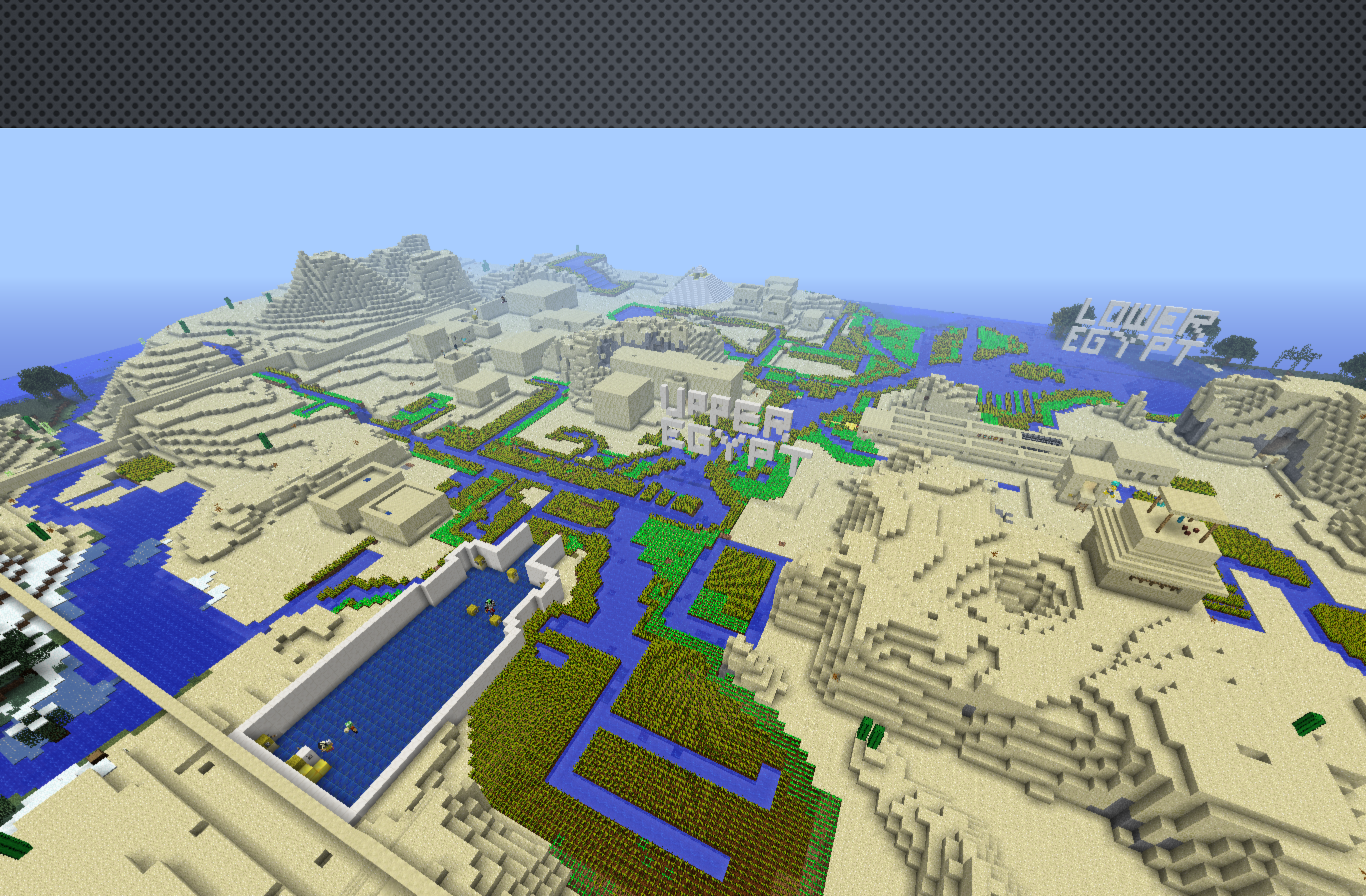
SOCIAL STUDIES



MINECRAFT HUMANITY — REFUGEE CRISIS — IMMERSIVEMIND







CODING



STEVE ISAACS MINECRAFT CODING

HOW DO YOU GET ACCESS TO
MINECRAFT?

MINECRAFT EDUCATION EDITION



MINECRAFT SYMBALOO LINKS

MINECRAFT EDUCATION EDITION

▼ **How much does it cost?**

We understand the demands on today's educators and are committed to making Minecraft: Education Edition as affordable and accessible as possible. Minecraft: Education Edition costs \$5 per user per year, and opportunities for volume licensing are also available by contacting your preferred reseller.

GAME CLUBS

RESOURCES/LINKS



[MINECRAFT SYMBALOO LINKS](#)



[TEACHERCRAFT: HOW TEACHERS LEARN TO
USE MINECRAFT IN THEIR CLASSROOMS](#)



[ALL MY SYMBALOO LINKS](#)



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(case sensitive)