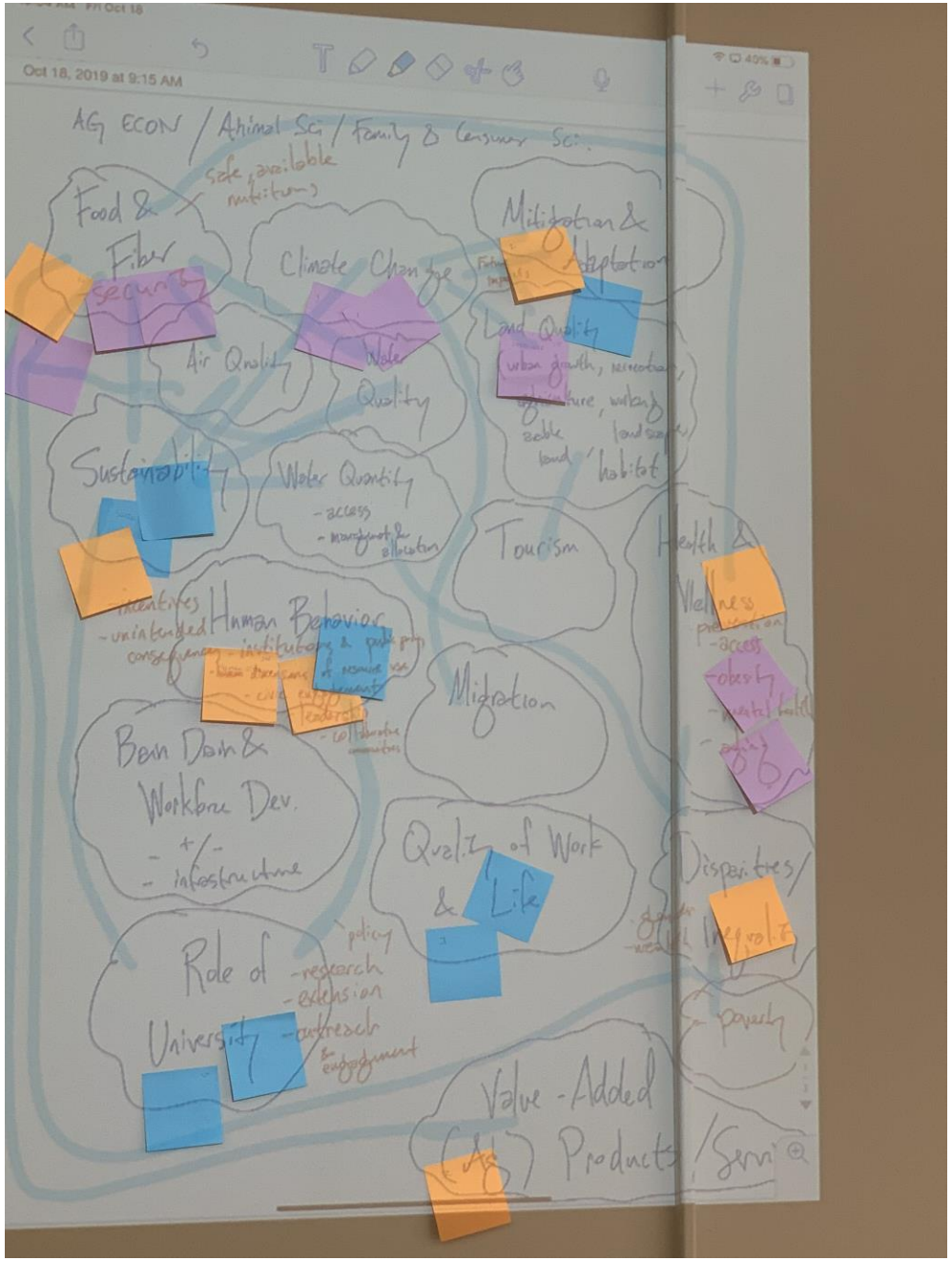
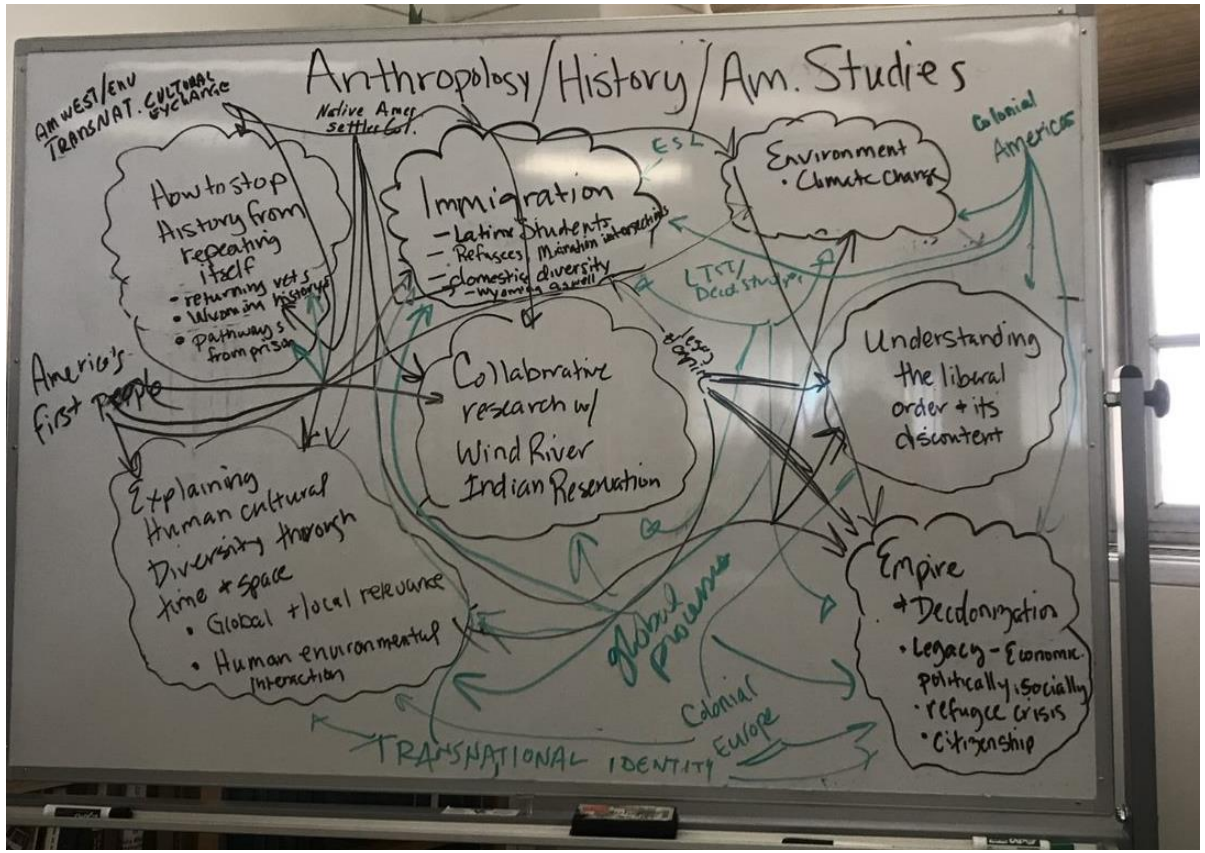
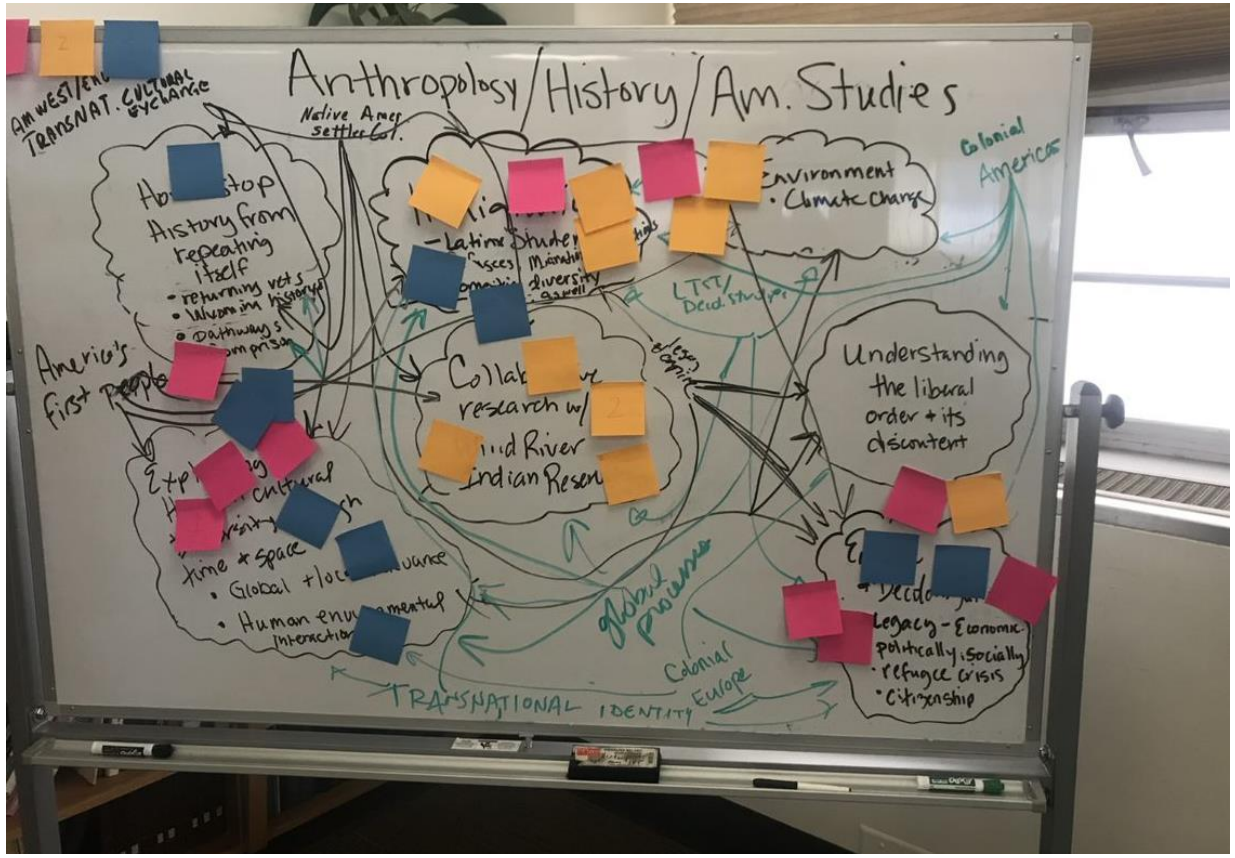
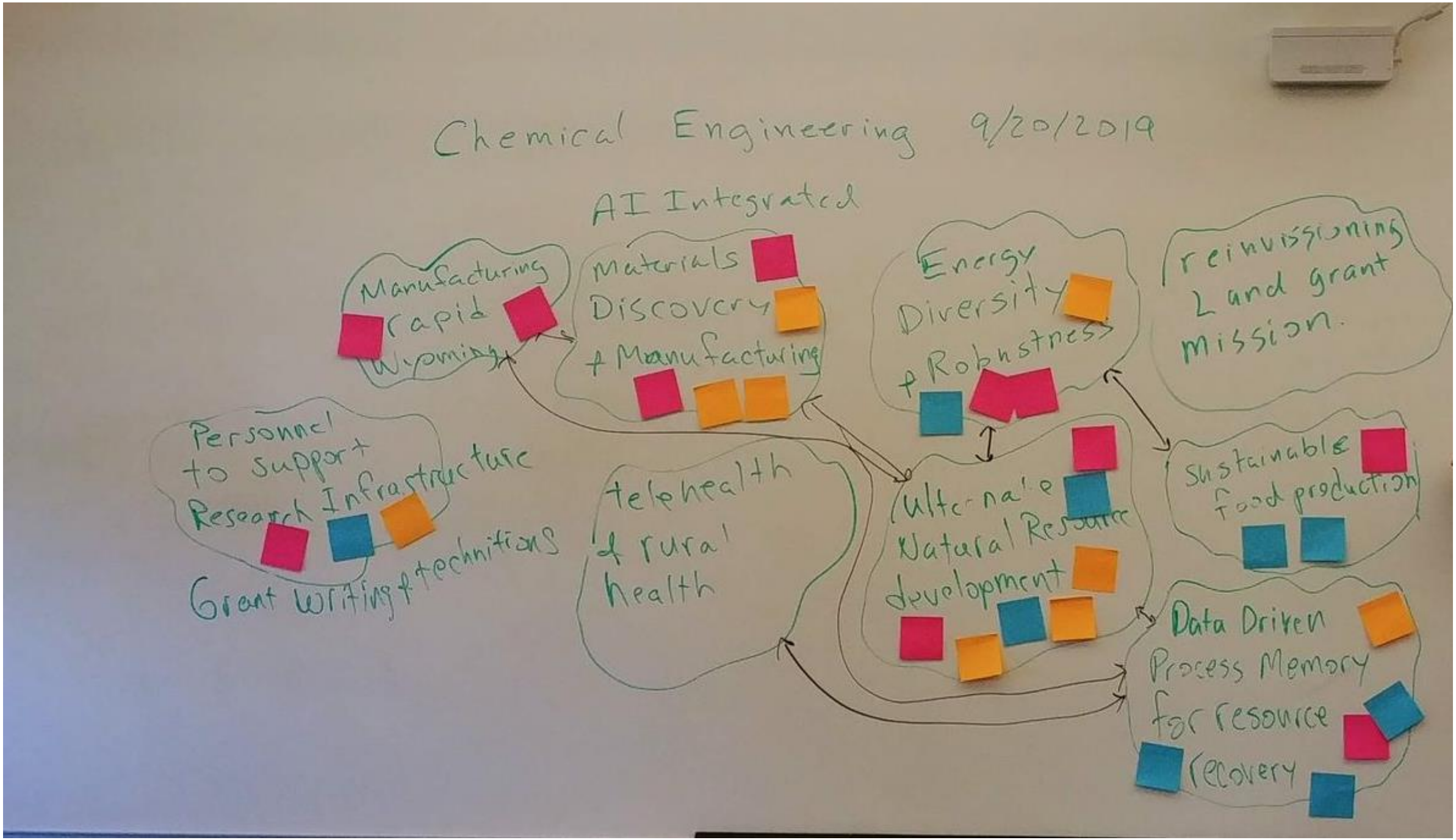
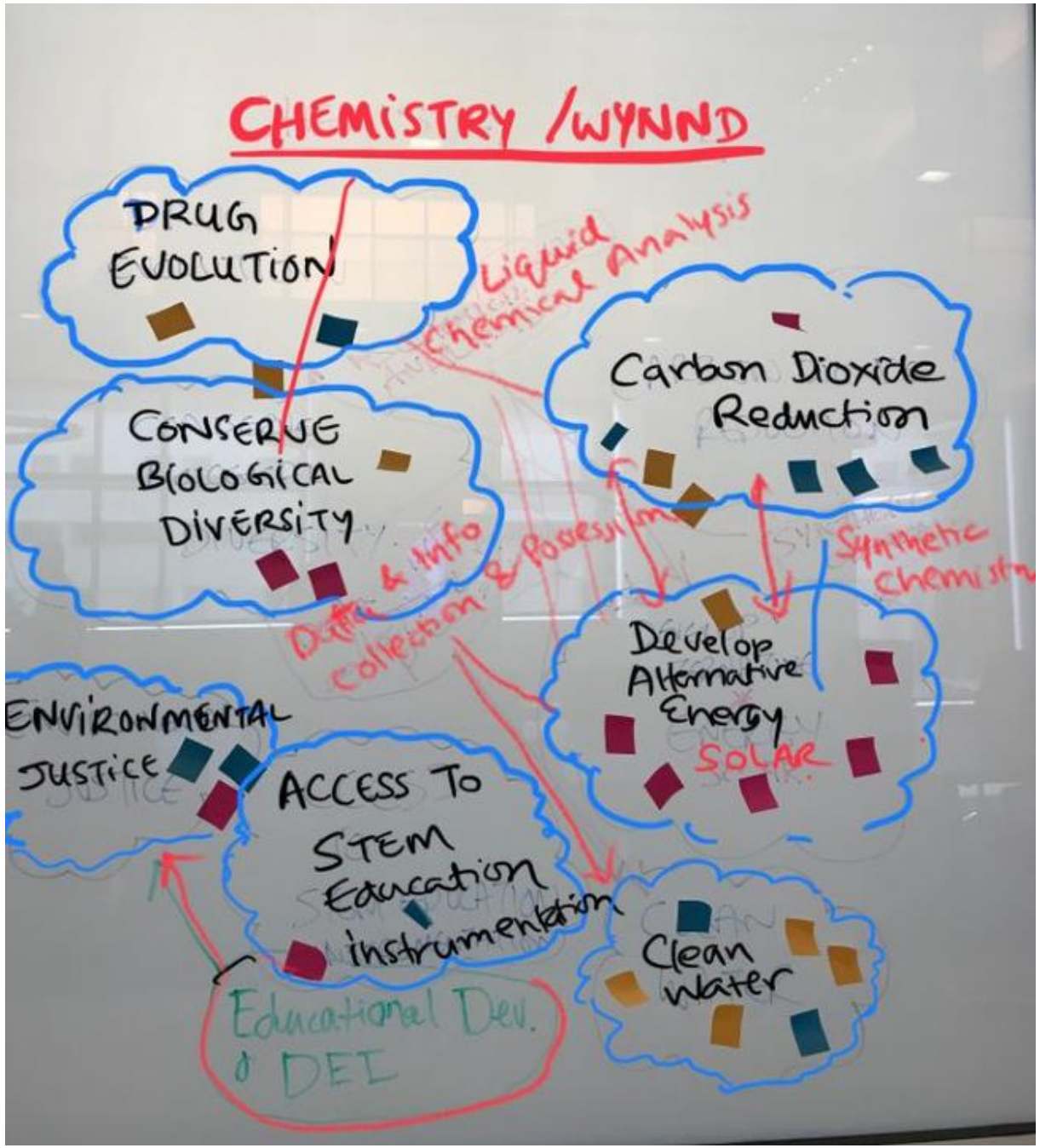
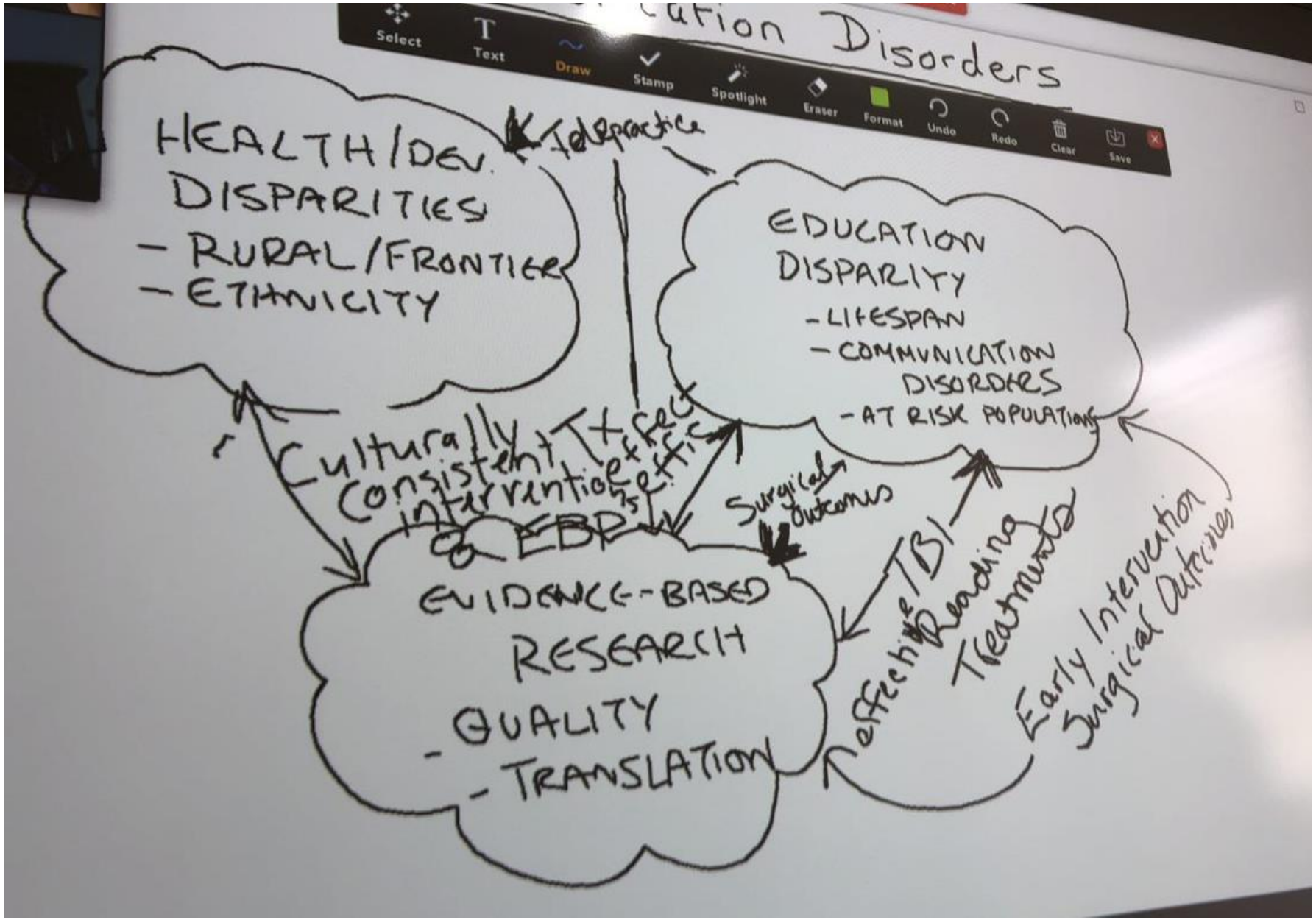

Oct 18, 2019 at 9:15 AM
AG ECON / Animal Sci / Family & Consumer Sci.
Food & Fiber
security
safe, available nutritions
Climate Change
Mitigation & Adaptation
Air Quality
Water Quality
Land Quality
urban growth, recreation, agriculture, working, arable land, landscape, habitat
Sustainability
Water Quantity
- access
- management & allocation
Tourism
Health & Wellness
- access
- obesity
Human Behavior
incentives
- unintended consequences
- institutions & public policy
- leadership
- collaborative communities
Migration
Brain Drain & Workforce Dev.
- +/-
- infrastructure
Quality of Work & Life
Disparities/ Inequality
- poverty
Role of University
policy
- research
- extension
- outreach & engagement
Value-Added (Ag) Products/Servi


Anthropology / History / Am. Studies
AM WEST/ENV TRANSNAT. CULTURAL EXCHANGE
Native Ames settler Col.
Colonial Americas
How to stop History from repeating itself
• returning vets
• Wyoming history
• pathways from prison
Immigration
– Latino Students
– Refugees Migration intersections
– domestic diversity
– Wyoming gazelle
ESL
Environment
• Climate change
LTST/ Decol. studies
Americas first people
Collaborative research w/ Wind River Indian Reservation
Understanding the liberal order + its discontent
Explaining Human cultural Diversity through time + space
• Global + local relevance
• Human environmental interaction
Empire + Decolonization
• Legacy – Economic, politically, socially
• refugee crisis
• Citizenship
global processes
Colonial Europe
TRANSNATIONAL IDENTITY


Anthropology / History / Am. Studies
AM WEST/ENV TRANSNAT. CULTURAL EXCHANGE
Native Ames settler Col.
Colonial Americas
History from repeating itself
• returning vets
• Wyoming history
• pathways
Environment
• Climate change
LTST/ Decol. studies
Americas first people
Understanding the liberal order + its discontent
time + space
• Human environmental interaction
Legacy – Economic, politically, socially
• refugee crisis
• Citizenship
global processes
Colonial Europe
TRANSNATIONAL IDENTITY

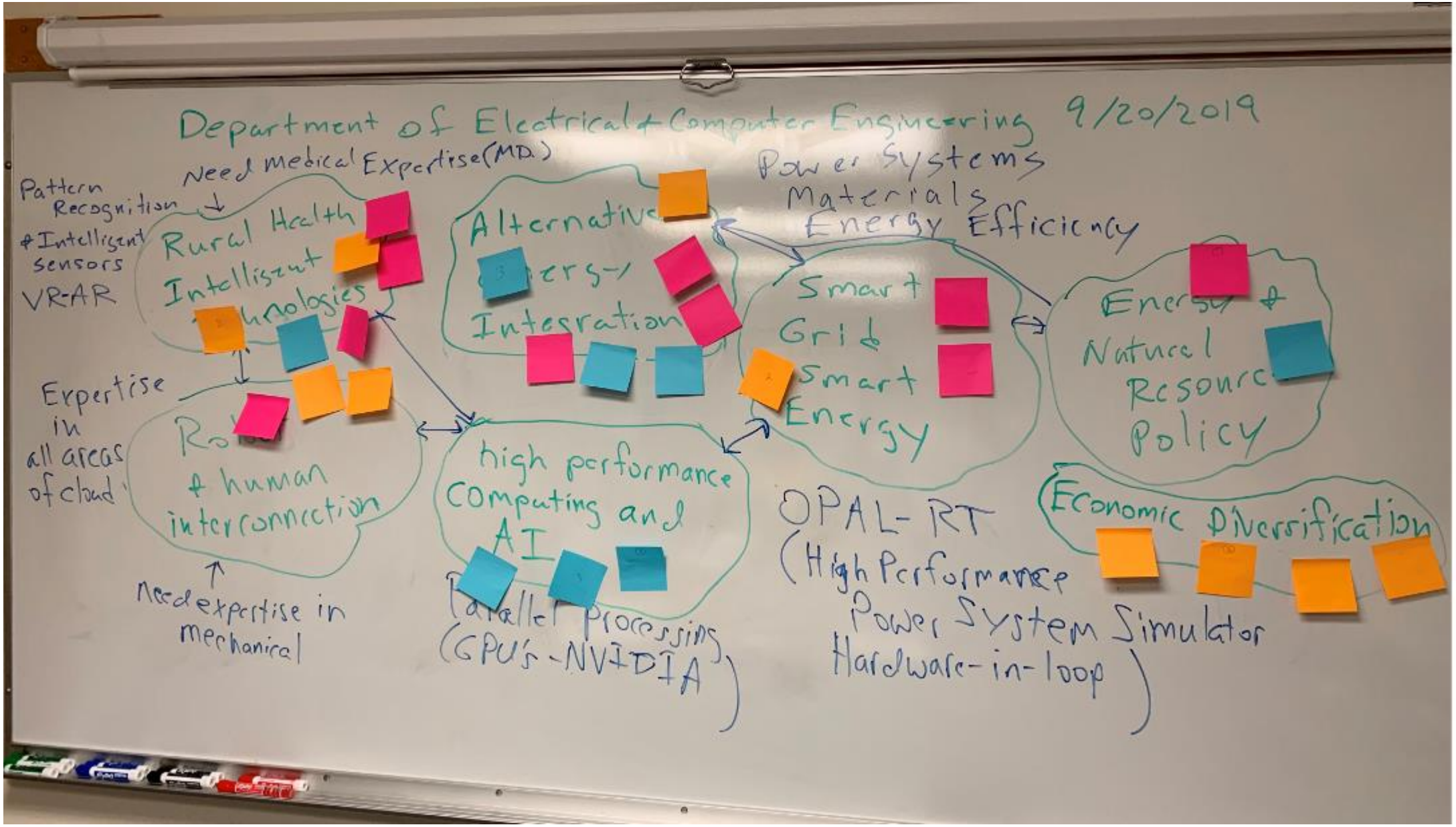

Chemical Engineering 9/20/2019
AI Integrated
Manufacturing rapid Upcoming
Materials Discovery & Manufacturing
Energy Diversity & Robustness
reinvisioning Land grant mission.
Personnel to support Research Infrastructure
Grant Writing & technicians
telehealth & rural health
Alternate Natural Resource development
Sustainable Food production
Data Driven Process Memory for resource recovery


CHEMISTRY /WYNND
DRUG EVOLUTION
Liquid Chemical Analysis
Carbon Dioxide Reduction
CONSERVE BIOLOGICAL DIVERSITY
Data & Info collection & Possession
Synthetic Chemistry
Develop Alternative Energy
SOLAR
ENVIRONMENTAL JUSTICE
ACCESS TO STEM Education instrumentation
Clean water
Educational Dev. & DEI

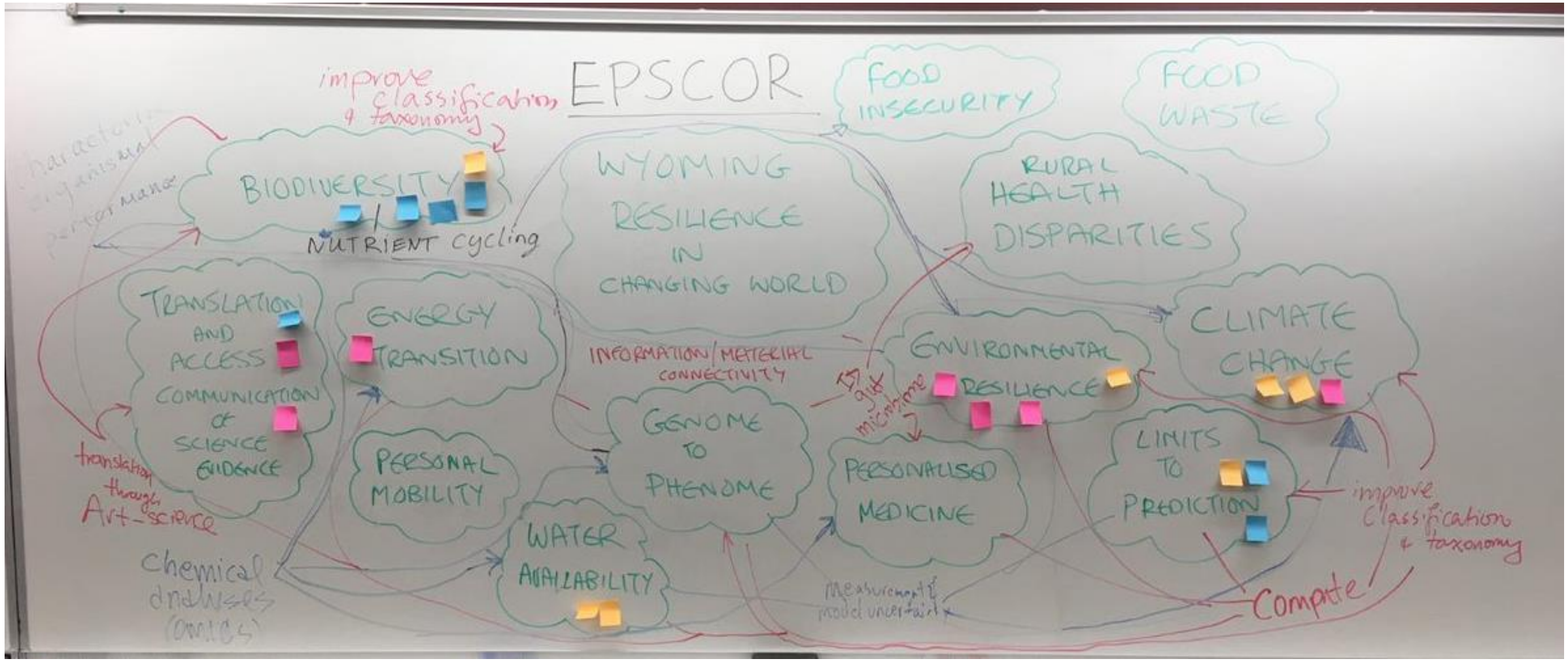


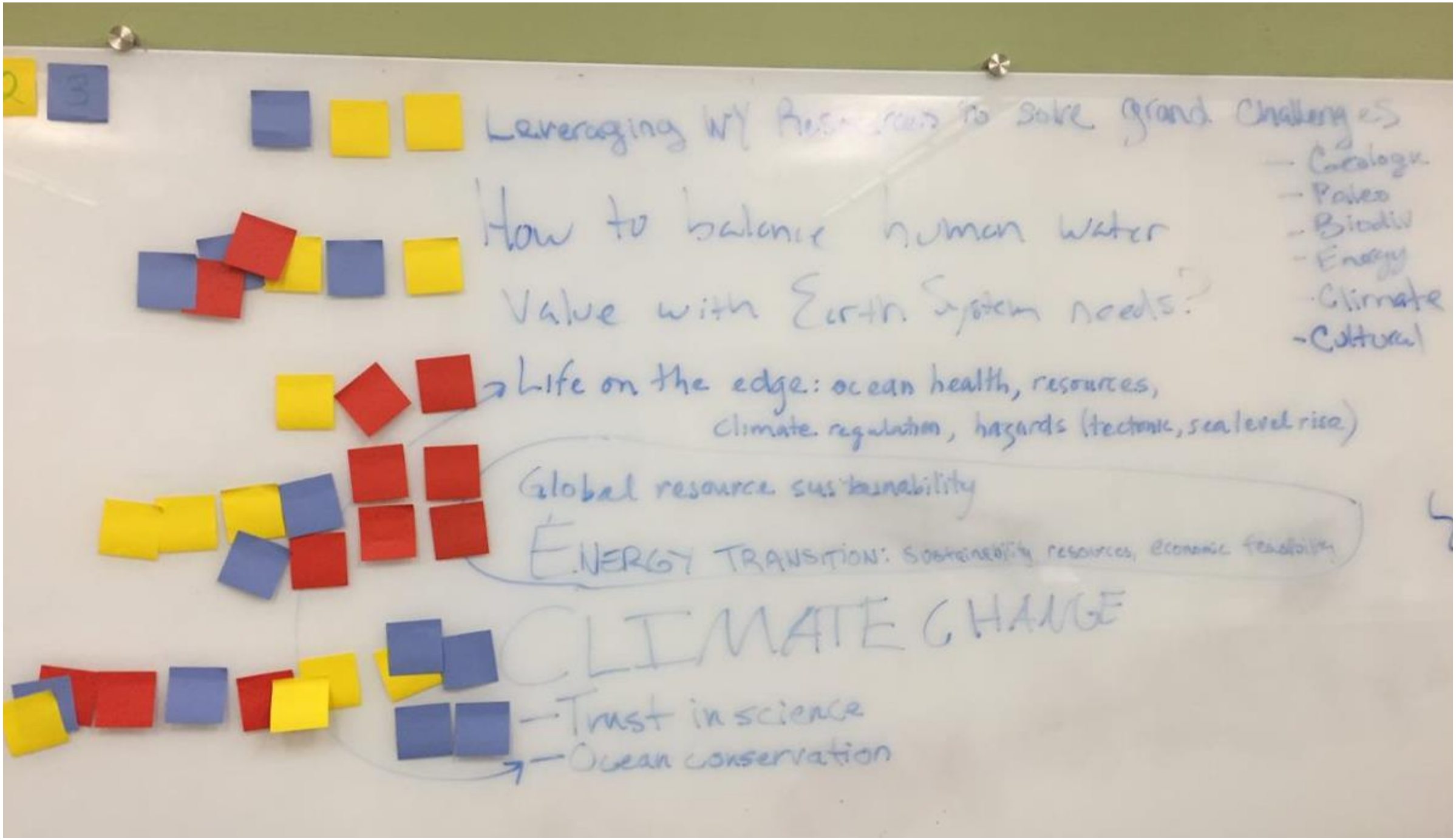
Select
Text
Draw
Stamp
Spotlight
Eraser
Format
Undo
Redo
Clear
Save
Disorders
HEALTH/DEV.
DISPARITIES
- RURAL/FRONTIER
- ETHNICITY
Telepractice
EDUCATION
DISPARITY
- LIFESPAN
- COMMUNICATION
DISORDERS
- AT RISK POPULATIONS
Culturally
consistent
interventions
& EBP's
Tx effect
effic
Surgical
Outcomes
EVIDENCE-BASED
RESEARCH
- QUALITY
- TRANSLATION
effective TBI
Reading
Treatments
Early Intervention
Surgical Outcomes

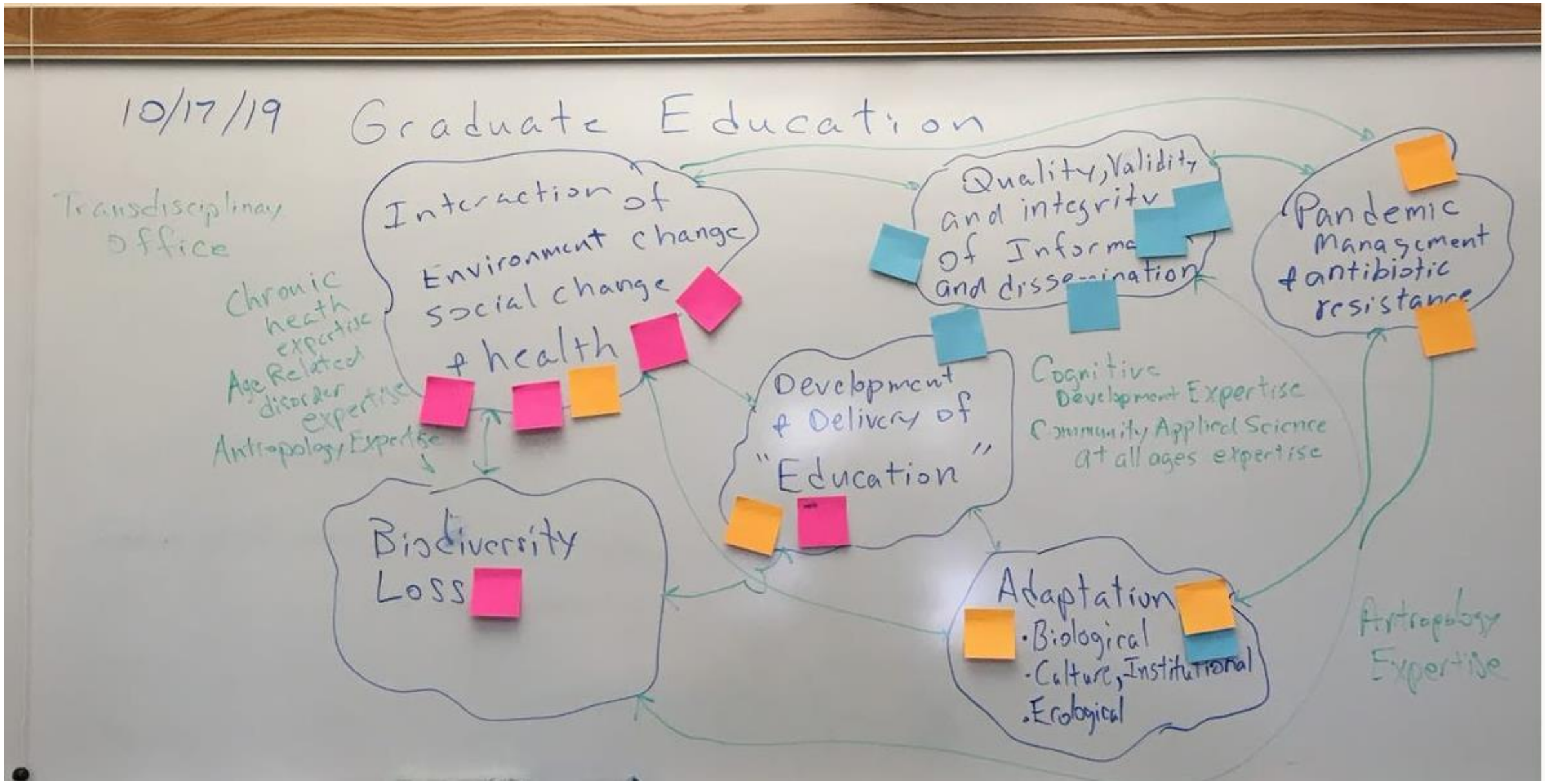
Computer Science / Civil / Arc Engineering
Computing Monoculture
Philosophy of Computer Science
Philip Schlump I Build things
T2 Computer Science at Scale
- K-12 - learning
- Entrepreneurship
Virtual environments
concrete
Sustainable infrastructure
- aging infrastructure
- advance durable materials
HOUSING
Water Management
- fresh water
- waste water
Desalination
Hydrology Wea. Res.
future transportation Systems
Autonomous vehicles
Drones
Renewable energy
Solar
Geotechnical/Geomechanics
I have Lined on Solar
Cloud computing
Issues on the internet
- trolling
- bullying
Virtual Humans
Health
- Repurposing Sensing technology for low cost Prosthetics
Intelligent Materials & Manufacturing
Optimization of resources in IOT devices
- power
- learning/behavior
Carbon Sequestration
- Global warming

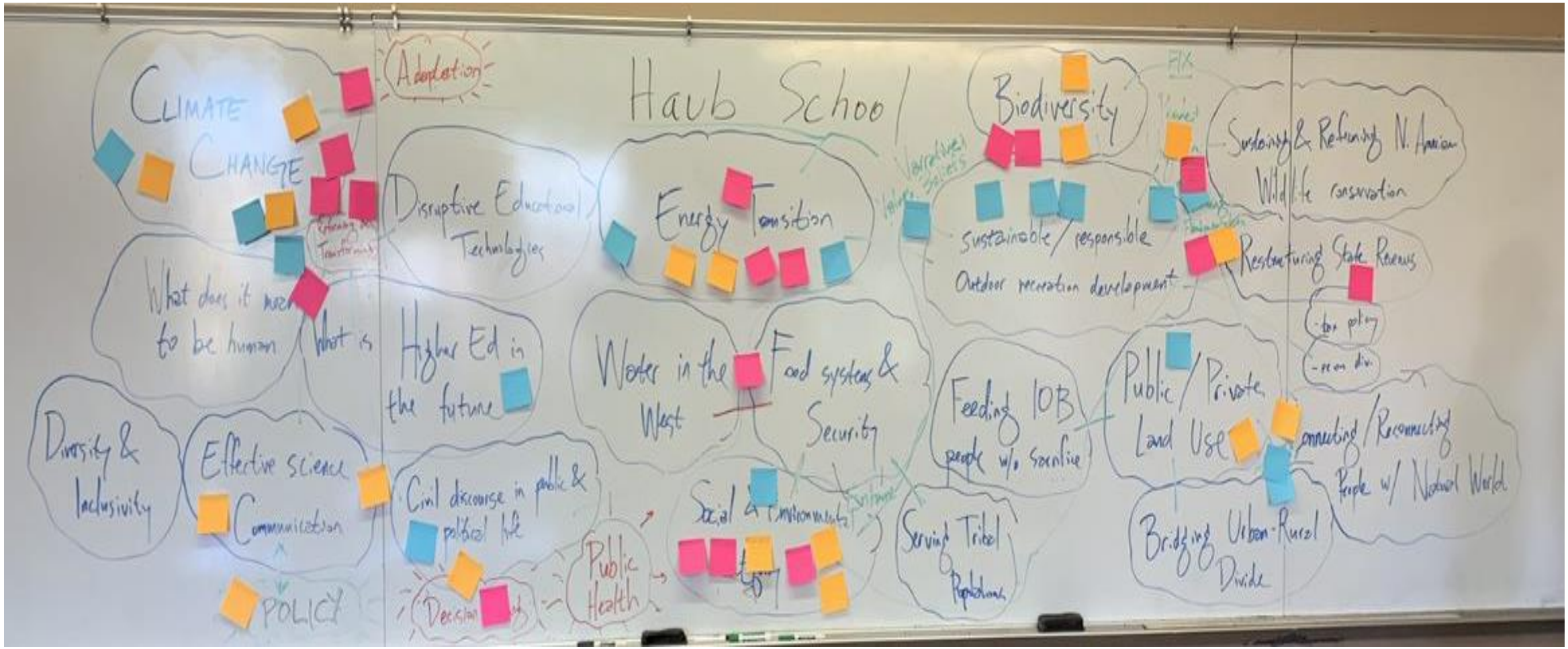

Department of Electrical + Computer Engineering 9/20/2019
Need medical Expertise (MD.)
Pattern Recognition
+ Intelligent sensors
VR-AR
Rural Health
Intelligent
Expertise in all areas of cloud
+ human interconnection
Need expertise in mechanical
Alternative
Integration
high performance Computing and AI
Parallel Processing (GPU's - NVIDIA)
Power Systems
Materials
Energy Efficiency
Smart Grid
Smart Energy
Natural Resource Policy
OPAL-RT (High Performance Power System Simulator Hardware-in-loop)
Economic Diversification

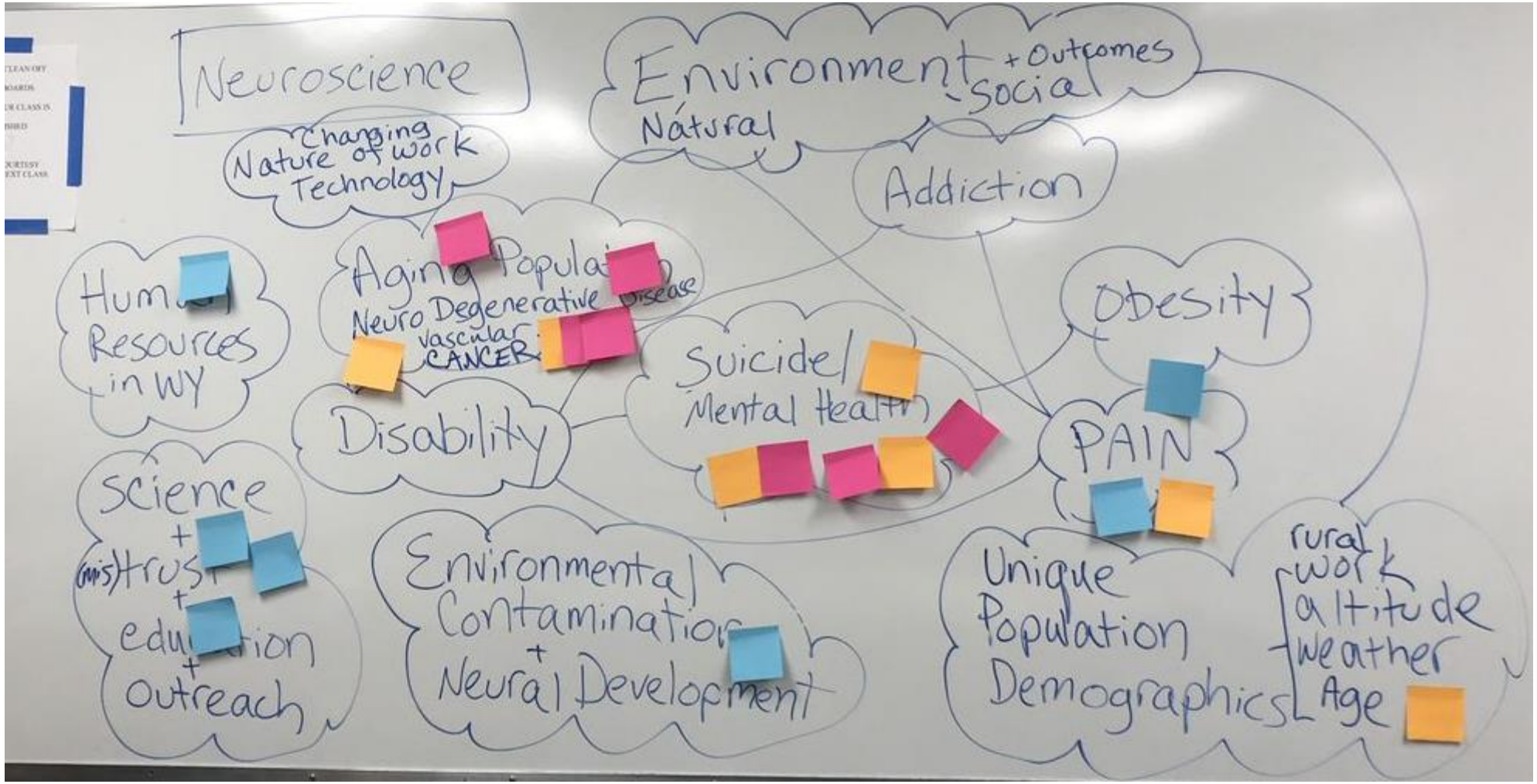
DEPARTMENT OF ENGLISH
"STORIES BEING TOLD"
GRAND RESEARCH CHALLENGE
NARRATIVES OF HUMAN INTERPLAY FOSSIL FUELS TO DIVERSE ENERGY
LITERARY STUDY OF STAKES CLIMATE CHANGE
LITERACY ENGAGEMENT ON DEMOCRACY IN HIGHER EDUCATION
Providing quality Higher ed + Outreach which encourages College participation
How art / aesthetics encourage social change
what is future of work?
Displaced memory
Ethics
"BEING HUMAN" ENGAGEMENT WITH CHANGE
Indigenous studies + Poetry
"QUALITY" OF DEMOCRACY
PUBLIC HUMANITIES & PUBLIC GOOD
LITERARY HISTORY IN HOW WE CONDUCT POLITICS & CIVIC DISCOURSE
COMMUNICATION AS CHALLENGE/OPPORTUNITY
RACE, CLASS, GENDER
Global citizenship

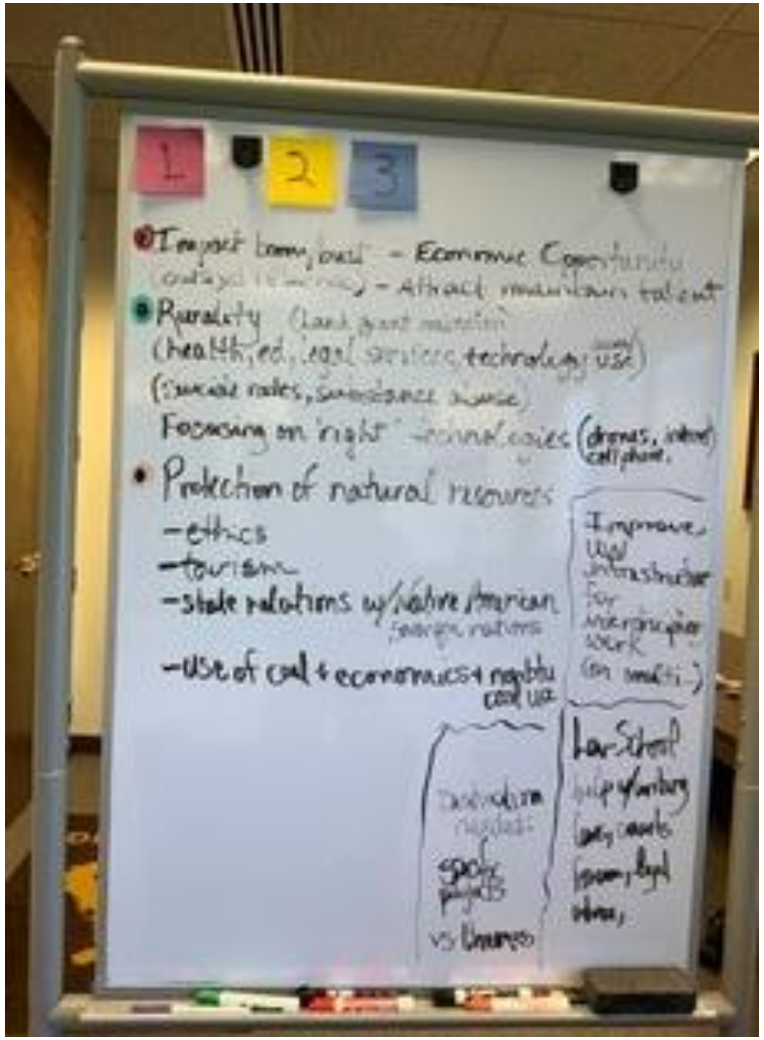

EPSCOR
improve classification & taxonomy
FOOD INSECURITY
FOOD WASTE
BIODIVERSITY
NUTRIENT cycling
WYOMING RESILIENCE IN CHANGING WORLD
RURAL HEALTH DISPARITIES
TRANSLATION AND ACCESS
COMMUNICATION OF SCIENCE EVIDENCE
ENERGY TRANSITION
INFORMATION/METERIAL CONNECTIVITY
ENVIRONMENTAL RESILIENCE
CLIMATE CHANGE
translation through Art-science
PERSONAL MOBILITY
GENOME TO PHENOME
gut microbiome
PERSONALISED MEDICINE
LIMITS TO PREDICTION
improve classification & taxonomy
WATER AVAILABILITY
Chemical analyses (OMICS)
measurement of model uncertainty
Compute


Leveraging WY Resources to solve grand Challenges
How to balance human water
Value with Earth System needs?
- Ecology
- Paleo
- Biodiv
- Energy
- Climate
- Cultural
Life on the edge: ocean health, resources,
climate regulation, hazards (tectonic, sea level rise)
Global resource sustainability
ENERGY TRANSITION: sustainability resources, economic feasibility
CLIMATE CHANGE
- Trust in science
- Ocean conservation

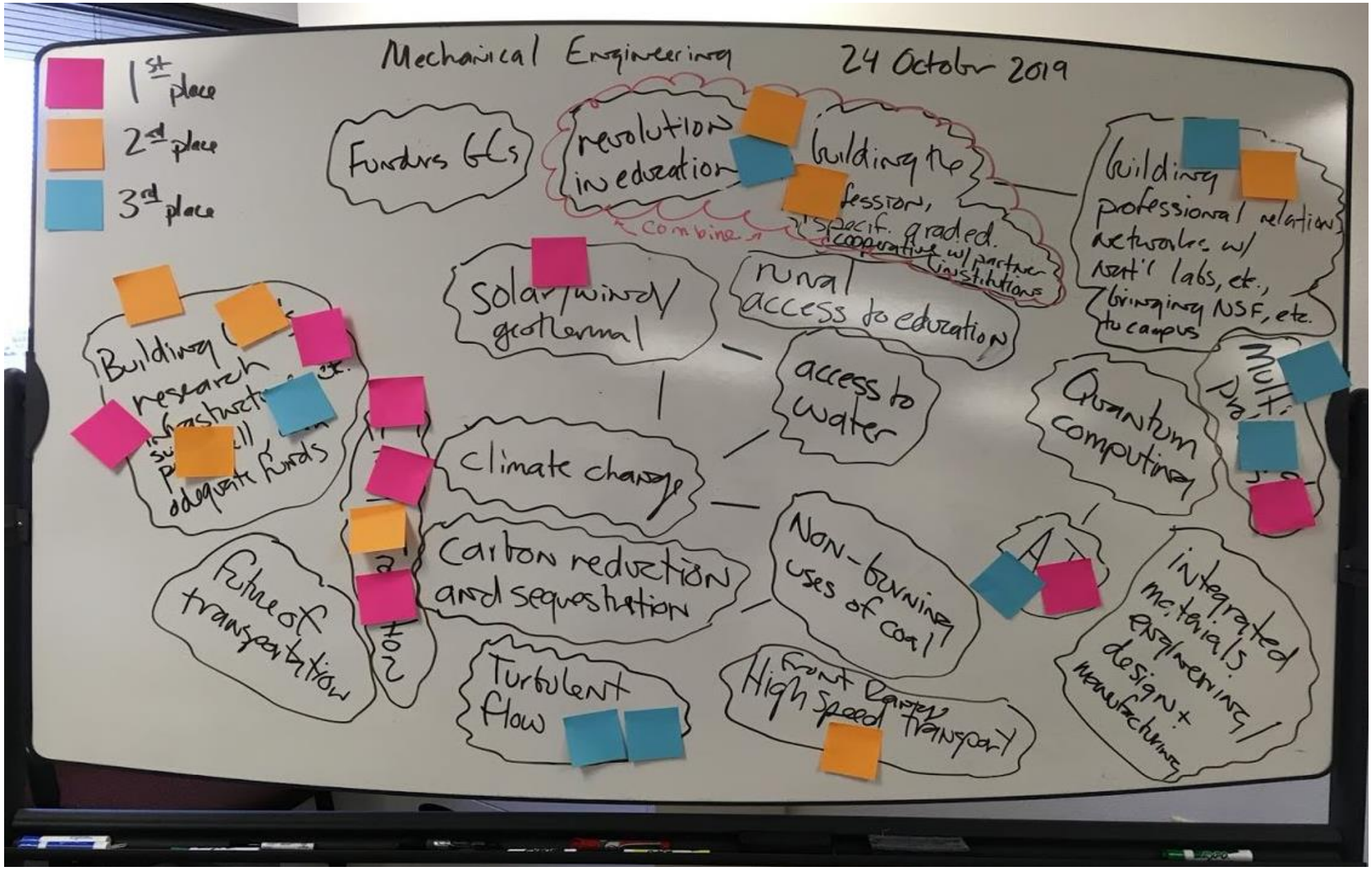

10/17/19
Graduate Education
Transdisciplinary Office
Interaction of Environment change social change & health
Chronic heath expertise
Age Related disorder expertise
Antropology Expertise
Quality, Validity and integrity of Informa and disse-ination
Pandemic Management & antibiotic resistance
Development & Delivery of "Education"
Cognitive Development Expertise
Community Applied Science at all ages expertise
Biodiversity Loss
Adaptation
·Biological
·Culture, Institutional
·Ecological
Antropology Expertise

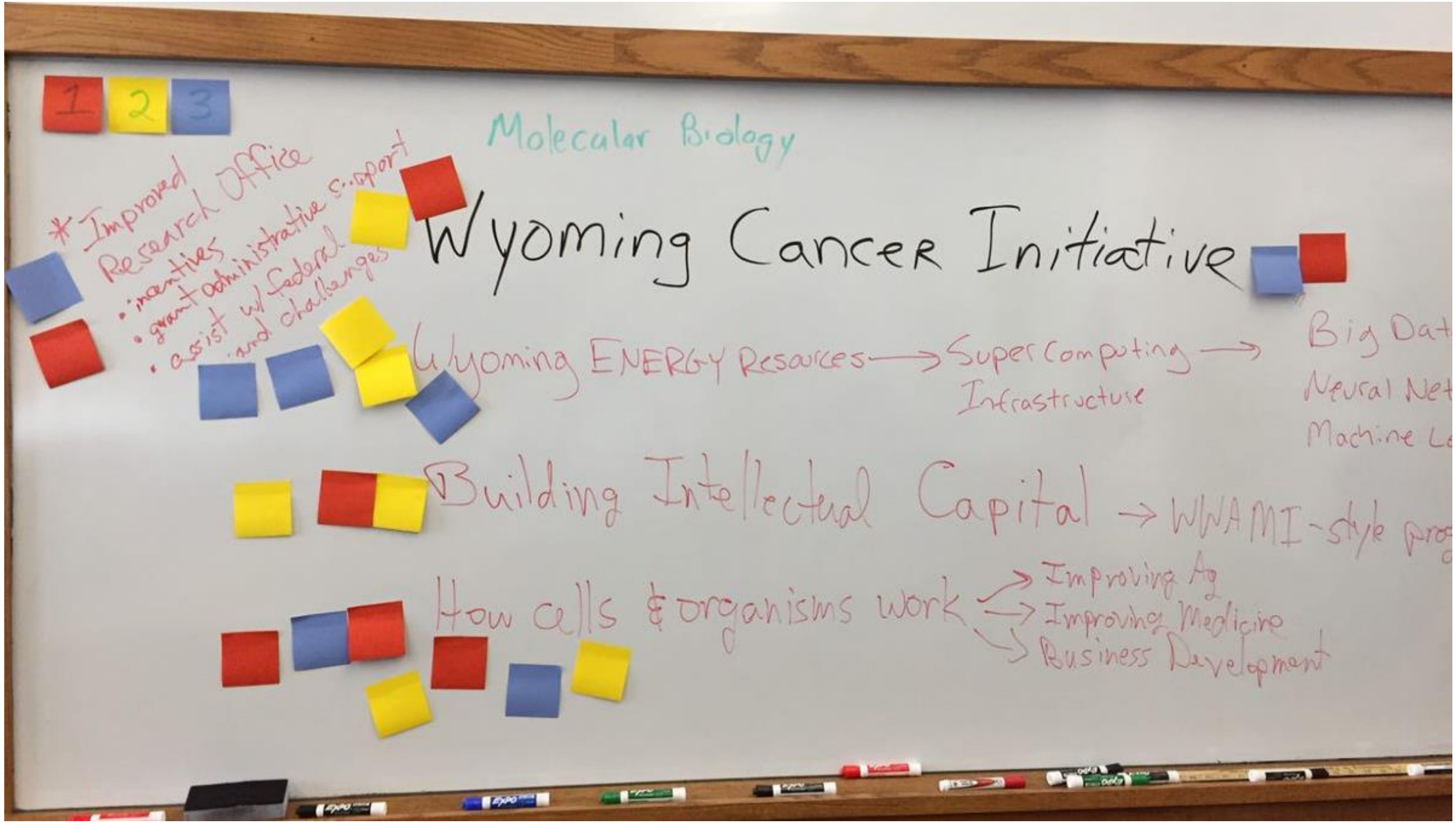

Haub School
CLIMATE CHANGE
Adaptation
Disruptive Educational Technologies
Energy Transition
Biodiversity
Sustaining & Refurbishing N. American Wildlife conservation
What does it mean to be human
What is
Higher Ed in the future
Water in the West
Food systems & Security
Sustainable / responsible Outdoor recreation development
Restructuring State Revenue
Diversity & Inclusivity
Effective science Communication
Civil discourse in public & political life
Public Health
Social & Environmental Justice
Feeding 10B people w/o sacrifice
Public / Private Land Use
Connecting / Reconnecting People w/ Natural World
Serving Tribal Populations
Bridging Urban-Rural Divide
POLICY
Decision

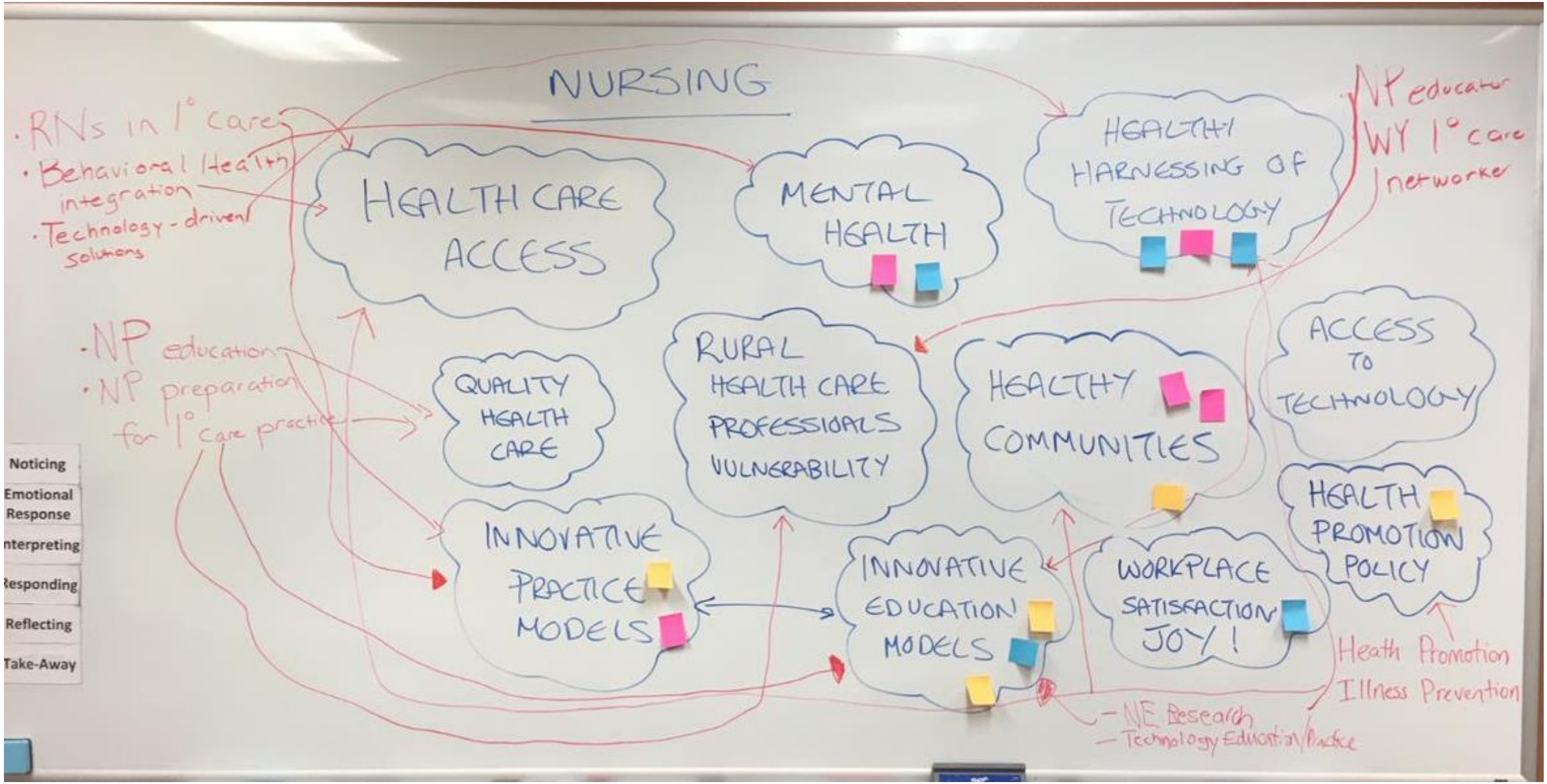

Neuroscience
Environment + Outcomes
Natural
Social
Changing Nature of work Technology
Addiction
Human Resources in WY
Aging Population
Neuro Degenerative Disease
vascular
CANCER
Obesity
Suicide/ Mental Health
Disability
PAIN
Science + (mis)trust + education + Outreach
Environmental Contamination + Neural Development
Unique Population Demographics
rural work
altitude
weather
Age

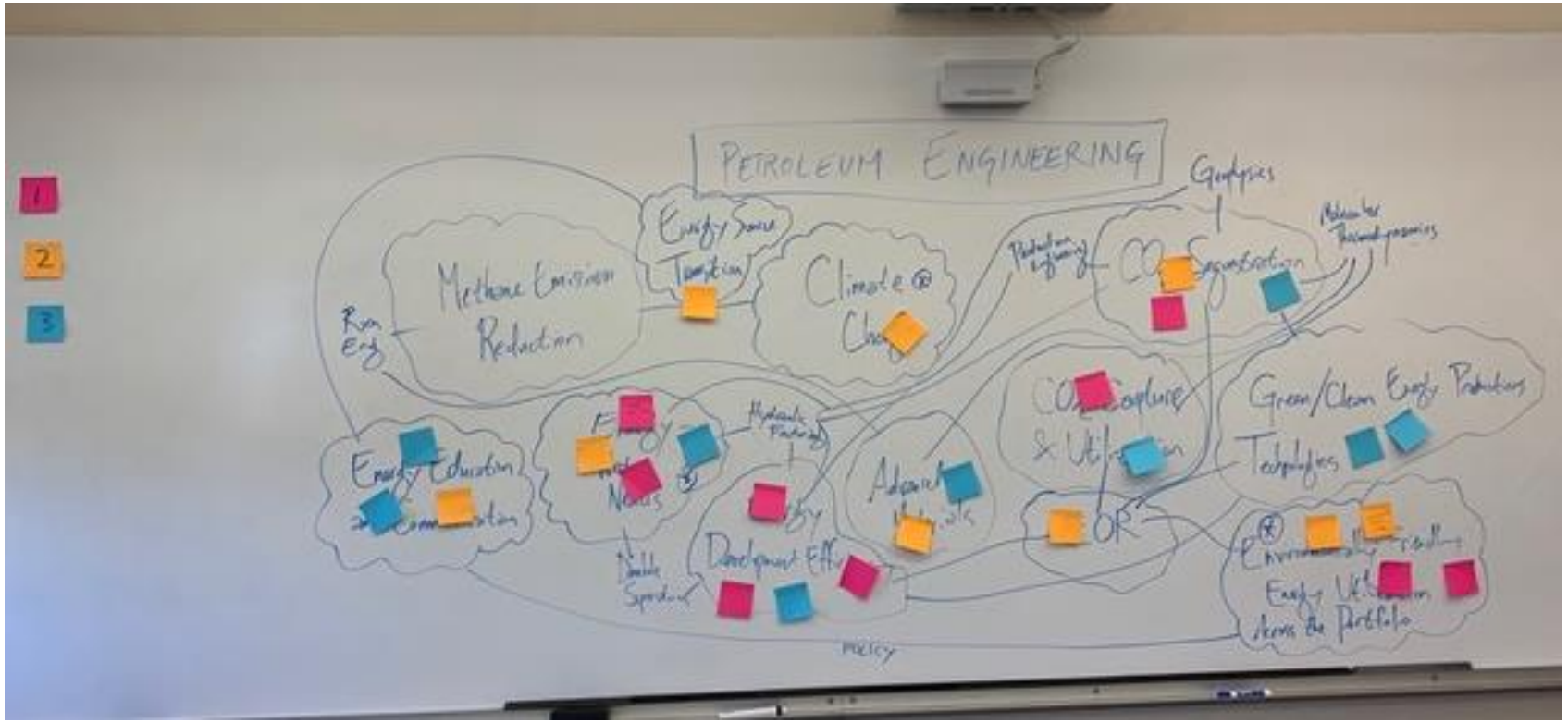

1
2
3
Impact boom, bust - Economic Opportunity
- Attract mainbain talent
Rurality
(health, ed, legal services, technology use)
(suicide rates, substance abuse)
Focusing on 'right' technologies (drones, internet, cellphone.
Protection of natural resources
-ethics
-tourism
-state relations w/ Native American
-use of coal + economics + nonbtu coal use
Improve legal infrastructure for interdisciplinary work
Law School
vs Business

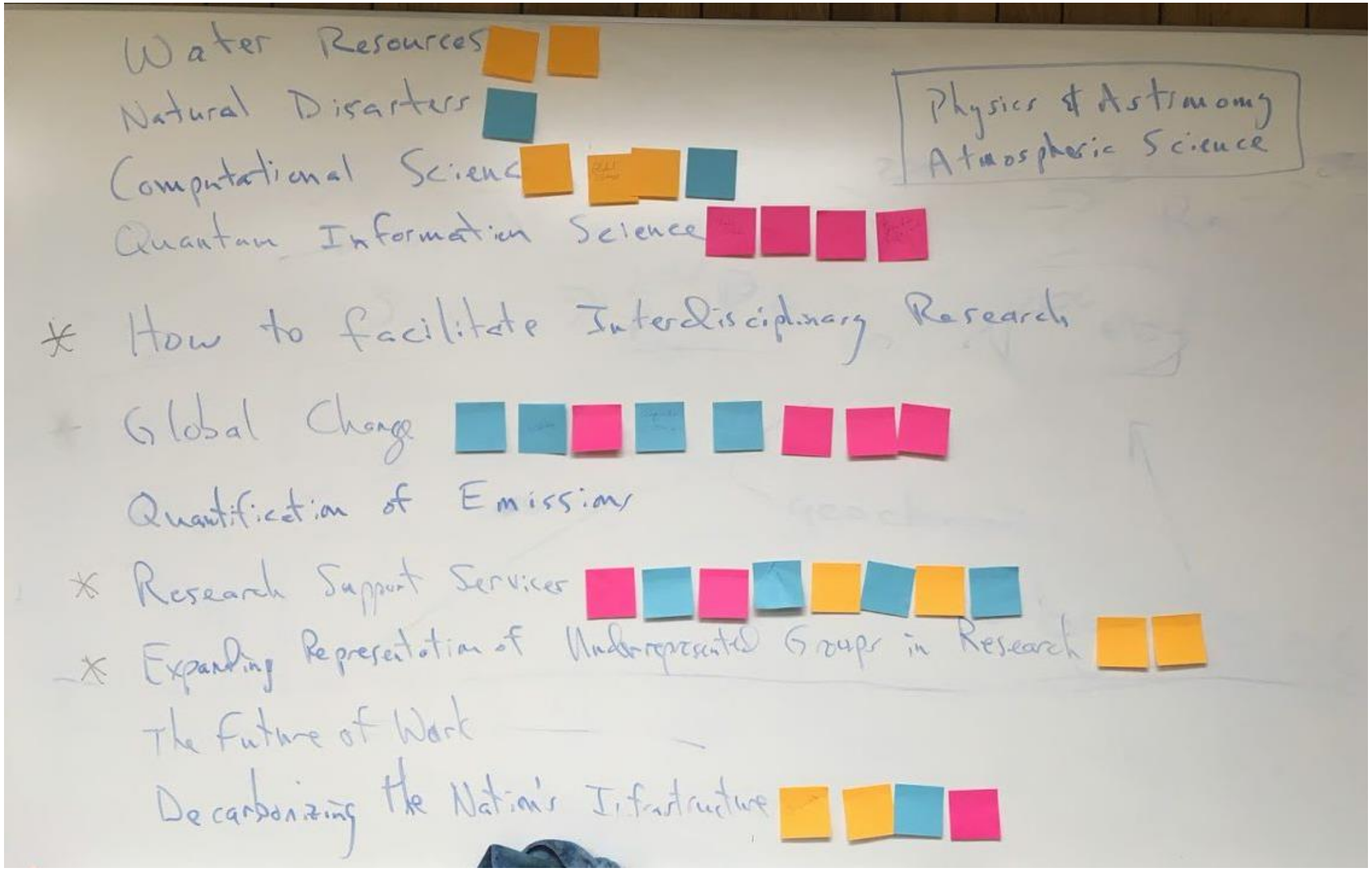
1
2
3
Focusing on 'right' technologies (drones, internet, cellphone.
-tourism
-state relations w/ Native American
-use of coal + economics + nonbtu coal use
Oct. 25, 2019
Law
Education
Law School
vs Business

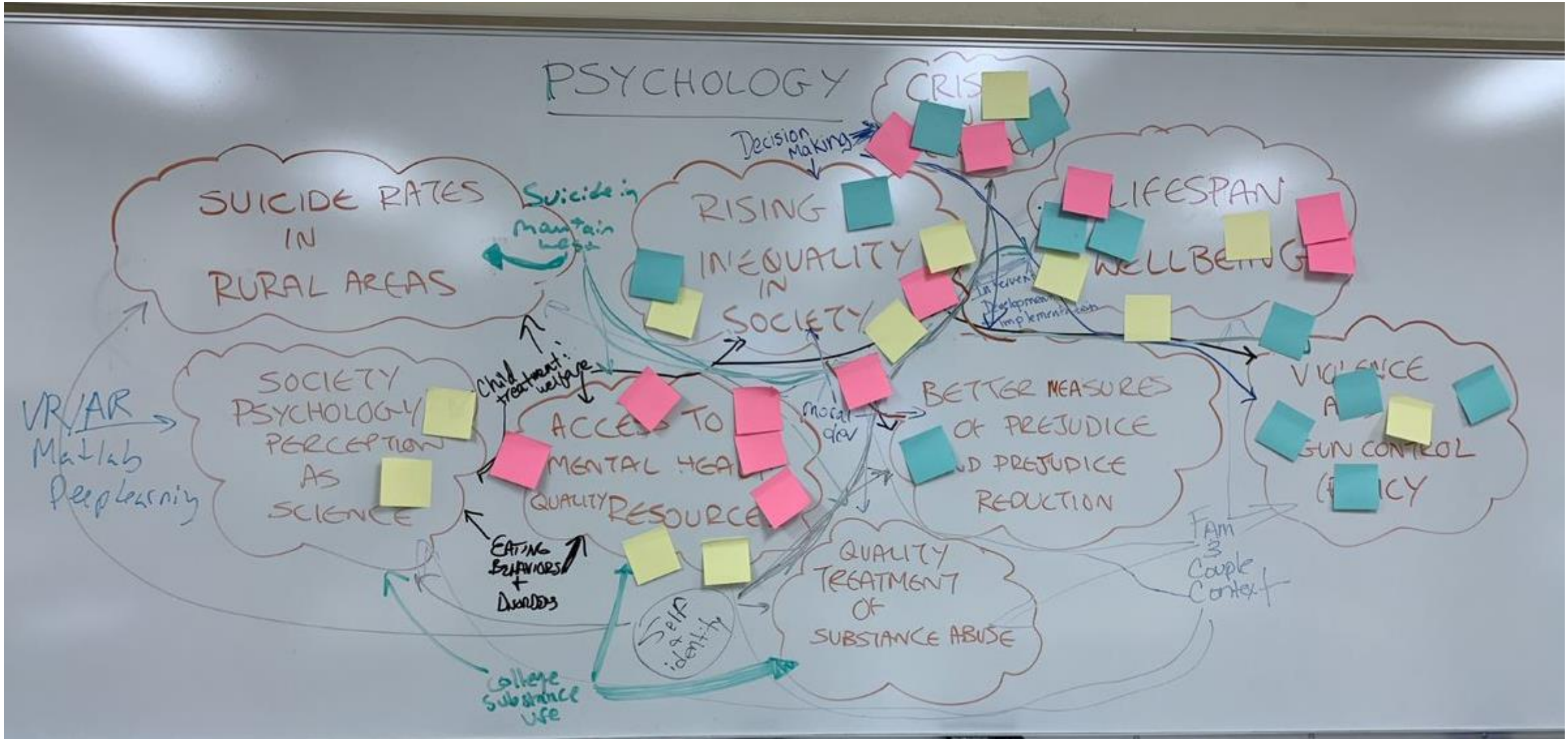

Mechanical Engineering
24 October 2019
1st place
2nd place
3rd place
Funders GCs
revolution in education
combine
building the
fession,
specif. graded.
cooperative w/ partner institutions
building professional relations networks w/ nat'l labs, etc., bringing NSF, etc. to campus
solar/wind/ geothermal
rural access to education
access to water
Quantum computing
Building
research
adequate funds
climate change
Carbon reduction and sequestration
Non-burning uses of coal
AI
integrated materials engineering/ design + manufacturing
future of transportation
Turbulent flow
Front Range High Speed Transport

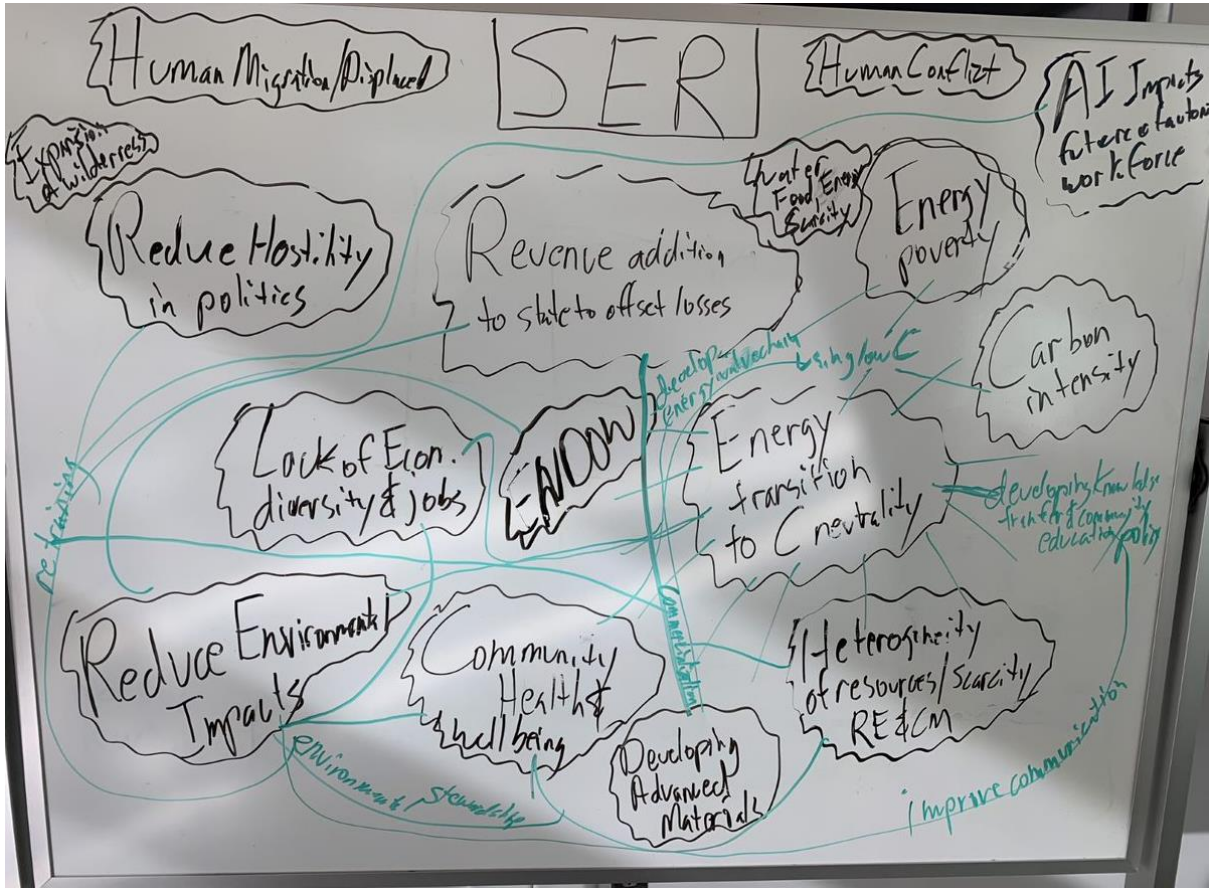

1
2
3
Molecular Biology
* Improved Research Office
• incentives
• grant administrative support
• assist w/ federal and challenges
Wyoming Cancer Initiative
Wyoming ENERGY Resources → Super Computing Infrastructure →
Big Dat
Neural Net
Machine Le
Building Intellectual Capital → WWAMI-style prog
How cells & organisms work
→ Improving Ag
→ Improving Medicine
→ Business Development

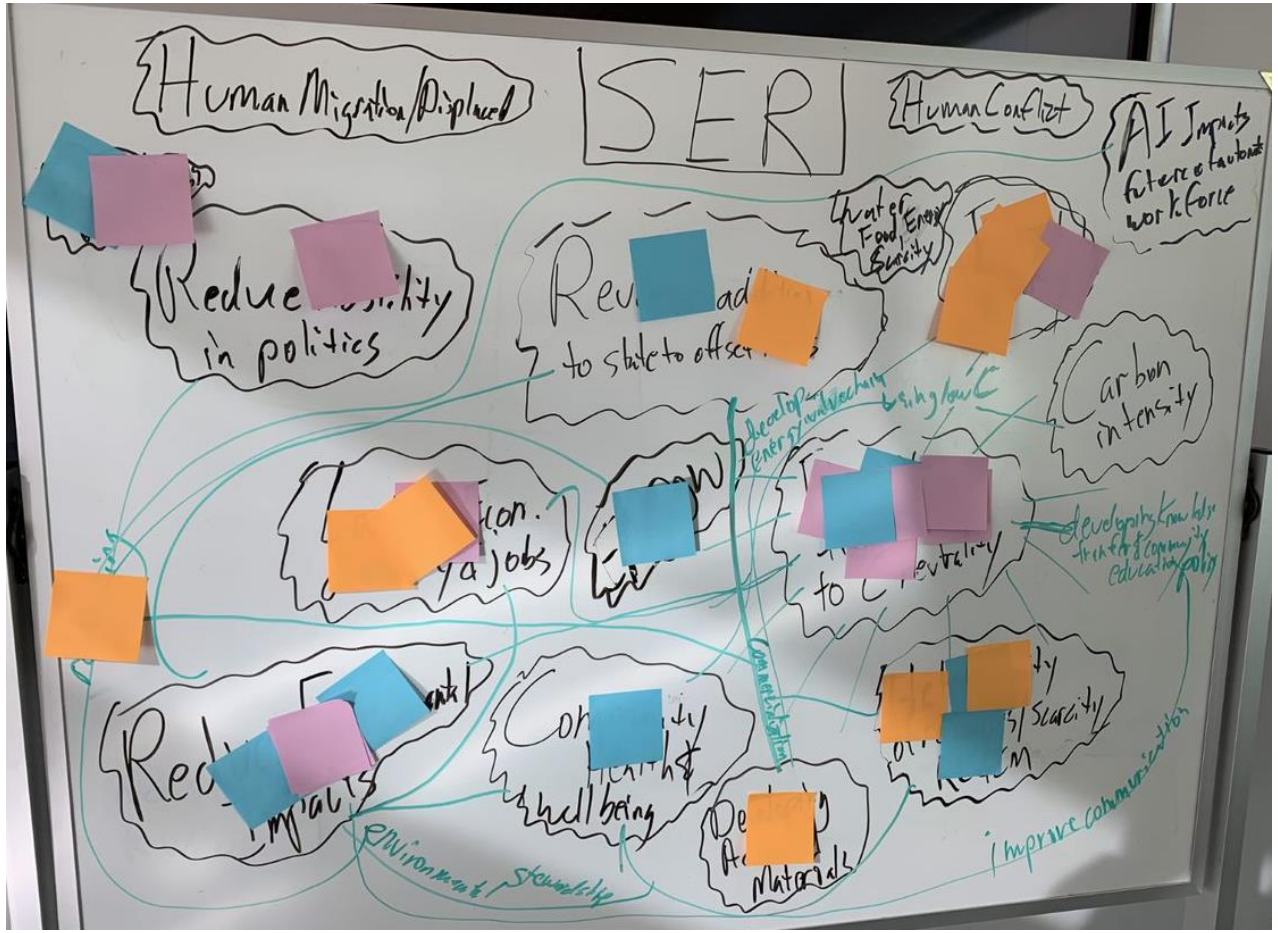

NURSING
HEALTH CARE ACCESS
MENTAL HEALTH
HEALTHY HARNESSING OF TECHNOLOGY
QUALITY HEALTH CARE
RURAL HEALTH CARE PROFESSIONALS VULNERABILITY
HEALTHY COMMUNITIES
ACCESS TO TECHNOLOGY
INNOVATIVE PRACTICE MODELS
INNOVATIVE EDUCATION MODELS
WORKPLACE SATISFACTION JOY!
HEALTH PROMOTION POLICY
· RNs in 1° care
· Behavioral Health integration
· Technology-driven solutions
· NP education
· NP preparation for 1° care practice
· NP educator
WY 1° care networks
Health Promotion
Illness Prevention
– NE Research
– Technology Education/Practice
Noticing
Emotional Response
Interpreting
Responding
Reflecting
Take-Away

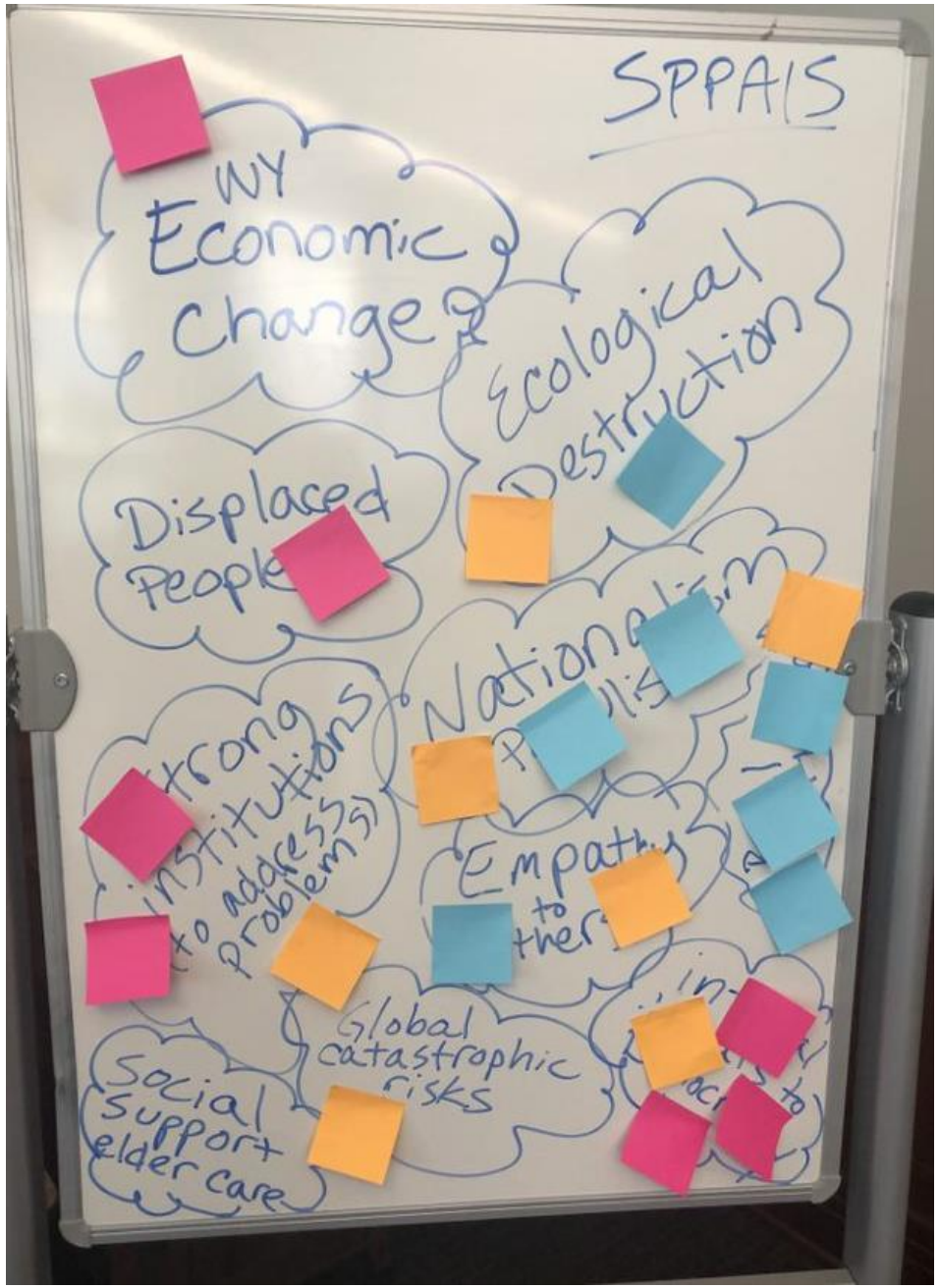

PETROLEUM ENGINEERING
Methane Emission Reduction
Climate
Geophysics
Green/Clean Energy Production
Technologies
Energy Education
Development Effi
OR
Energy Utilization Across the Portfolio
Policy

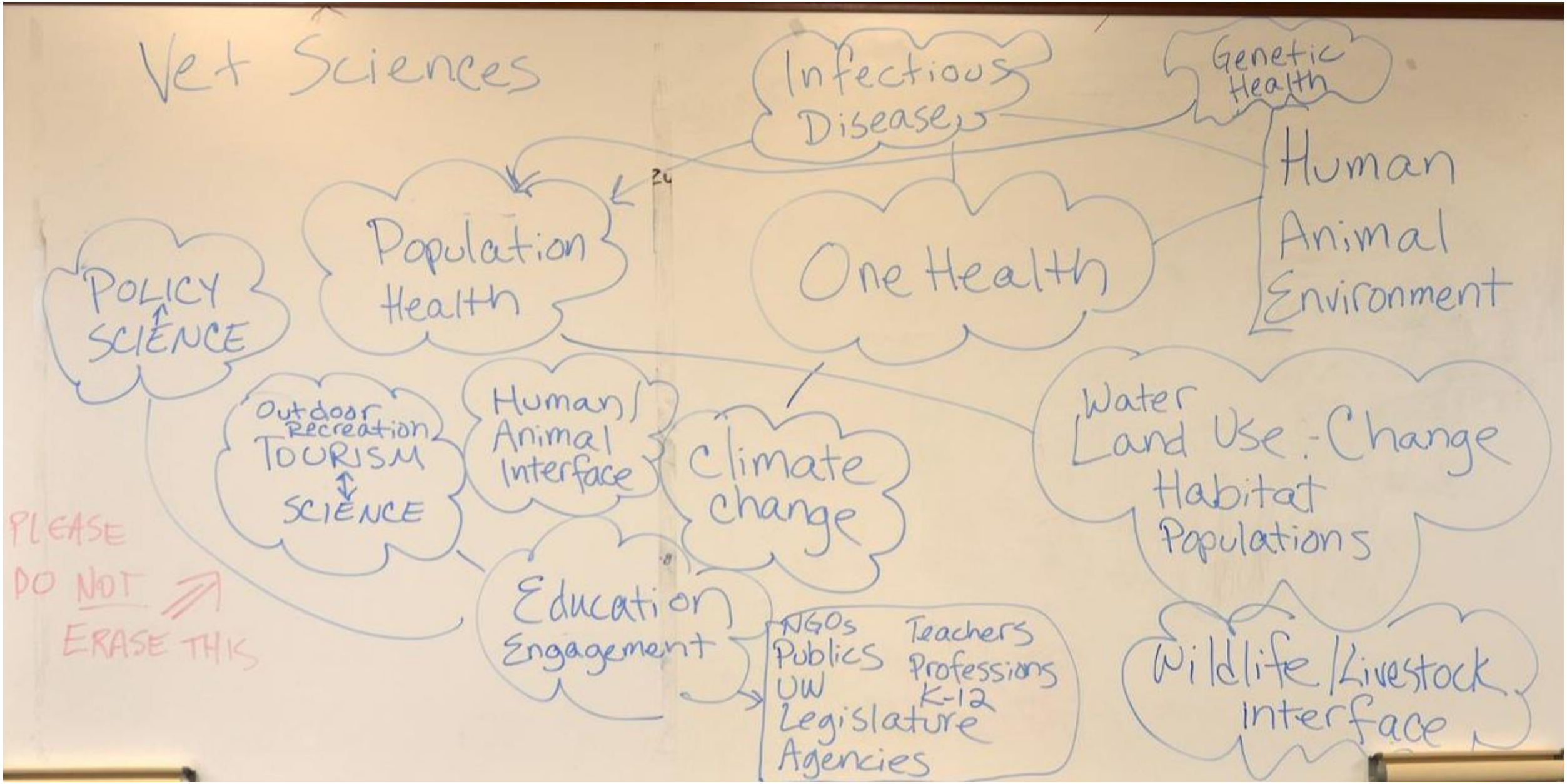

Water Resources
Natural Disasters
Computational Science
Quantum Information Science
Physics & Astronomy
Atmospheric Science
* How to facilitate Interdisciplinary Research
Global Change
Quantification of Emissions
* Research Support Services
* Expanding Representation of Underrepresented Groups in Research
The Future of Work
Decarbonizing the Nation's Infrastructure


PSYCHOLOGY
SUICIDE RATES IN RURAL AREAS
Suicide in
maintain
RISING INEQUALITY IN SOCIETY
Decision making
LIFESPAN
WELLBEING
SOCIETY PSYCHOLOGY PERCEPTION AS SCIENCE
Child treatment welfare
ACCESS TO MENTAL HEALTH QUALITY RESOURCES
moral dev
BETTER MEASURES OF PREJUDICE AND PREJUDICE REDUCTION
VIOLENCE
GUN CONTROL
VR/AR
Matlab
Deeplearning
EATING BEHAVIORS + DISORDERS
Self & identity
QUALITY TREATMENT OF SUBSTANCE ABUSE
Fam & Couple Context
College substance use


Human Migration/Displaced
SER
Human Conflict
AI Impacts future & autonomous workforce
Expansion of wilderness
Reduce Hostility in politics
Revenue addition to state to offset losses
Water Food Energy Scarcity
Energy poverty
Carbon intensity
develop energy wavechain
using low C
Lack of Econ. diversity & jobs
ENDOW
Energy transition to C neutrality
developing knowledge transfer & community education policy
retraining
Reduce Environmental Impacts
Community Health & well being
Heterogeneity of resources/Scarcity RE&CM
Developing Advanced Materials
environmental stewardship
improve communication


Human Migration/Displaced
SER
Human Conflict
AI Impacts future & autonomous workforce
Water Food Energy Scarcity
in politics
to state to offset
develop energy wavechain
using low C
Carbon intensity
developing knowledge transfer & community education policy
well being
Materials
environmental stewardship
improve communication


SPPAIS
WY
Economic
Change
Ecological
Destruction
Displaced
People
Nationalism
Strong
institutions
to address
problems
Empathy
to
others
Global
catastrophic
risks
Social
support
elder care

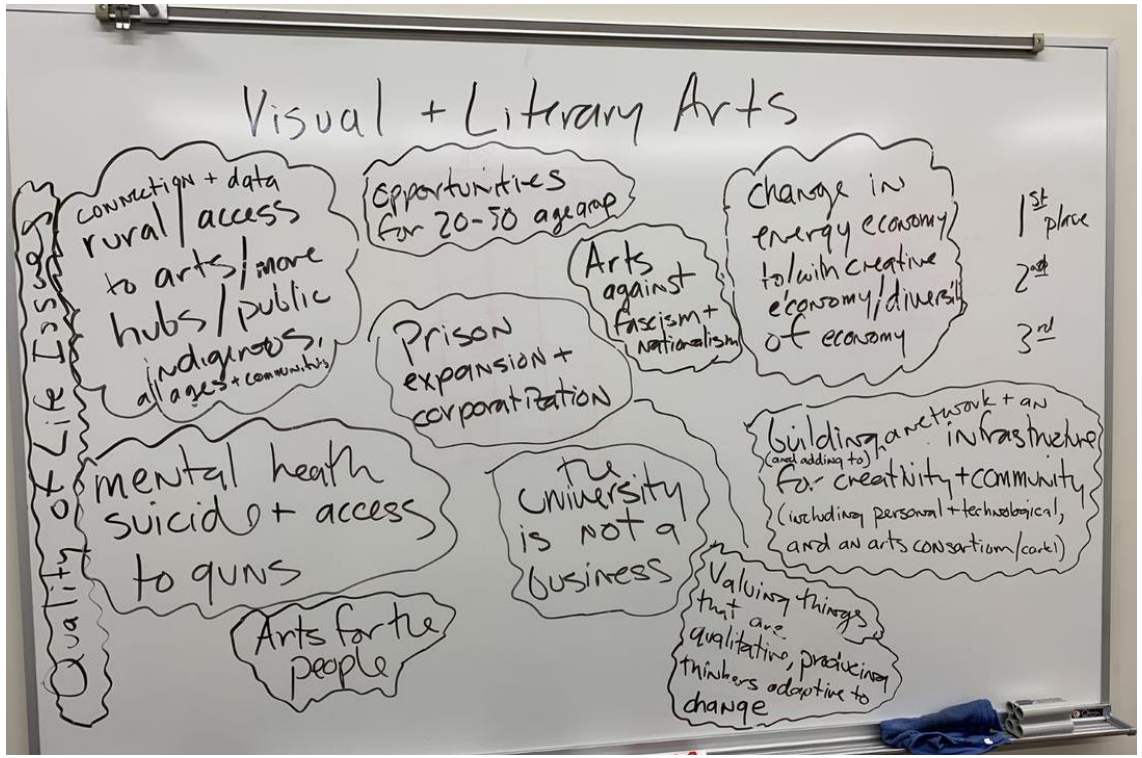

Vet Sciences
Infectious Disease
Genetic Health
Human
Animal
Environment
Population Health
One Health
POLICY
SCIENCE
Outdoor Recreation
TOURISM
SCIENCE
Human/ Animal Interface
Climate change
Water
Land Use - Change
Habitat
Populations
PLEASE DO NOT ERASE THIS
Education Engagement
NGOs
Publics
UW
Legislature
Agencies
Teachers
Professions
K-12
Wildlife/Livestock interface

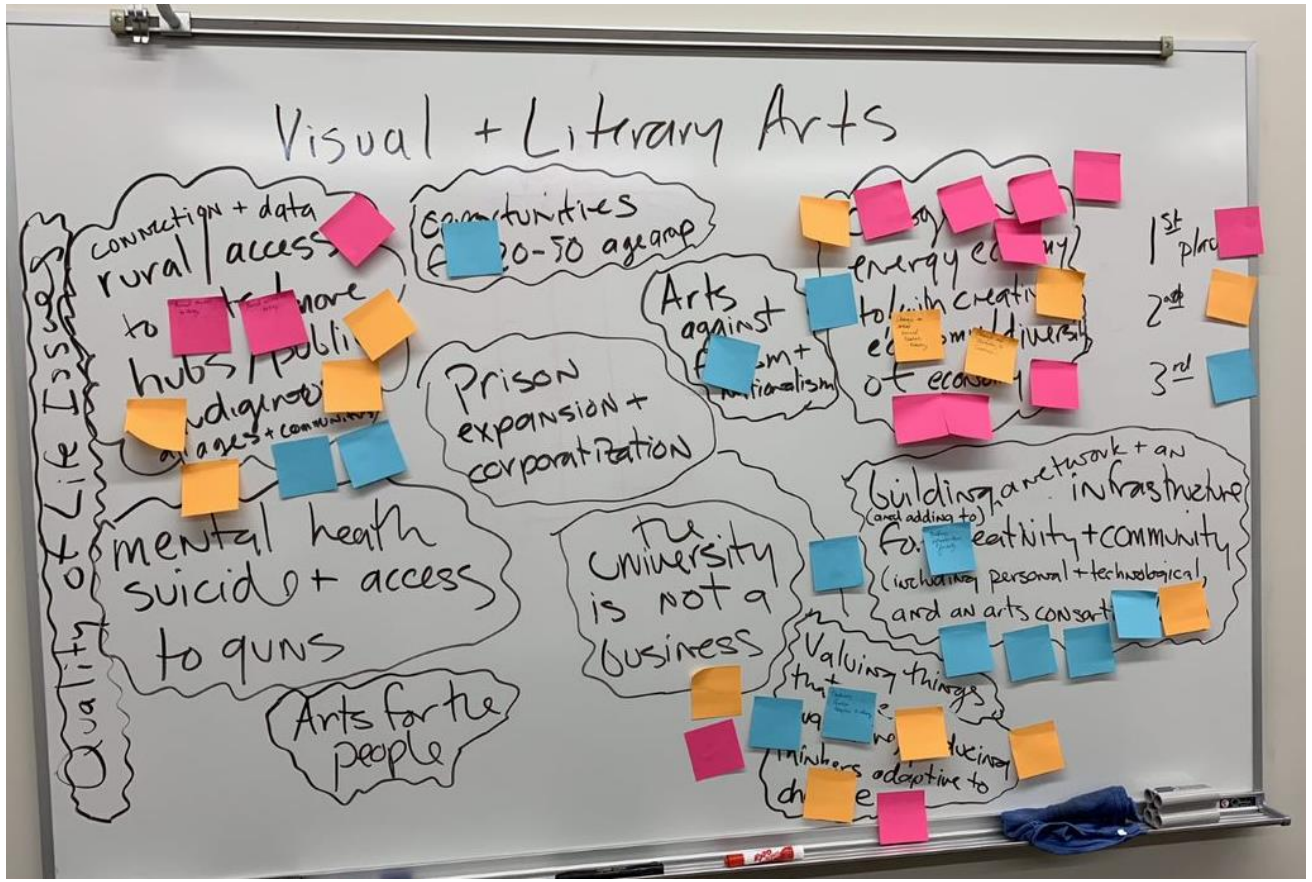
- One Health - health of humans, animals, and the environment is interdependent

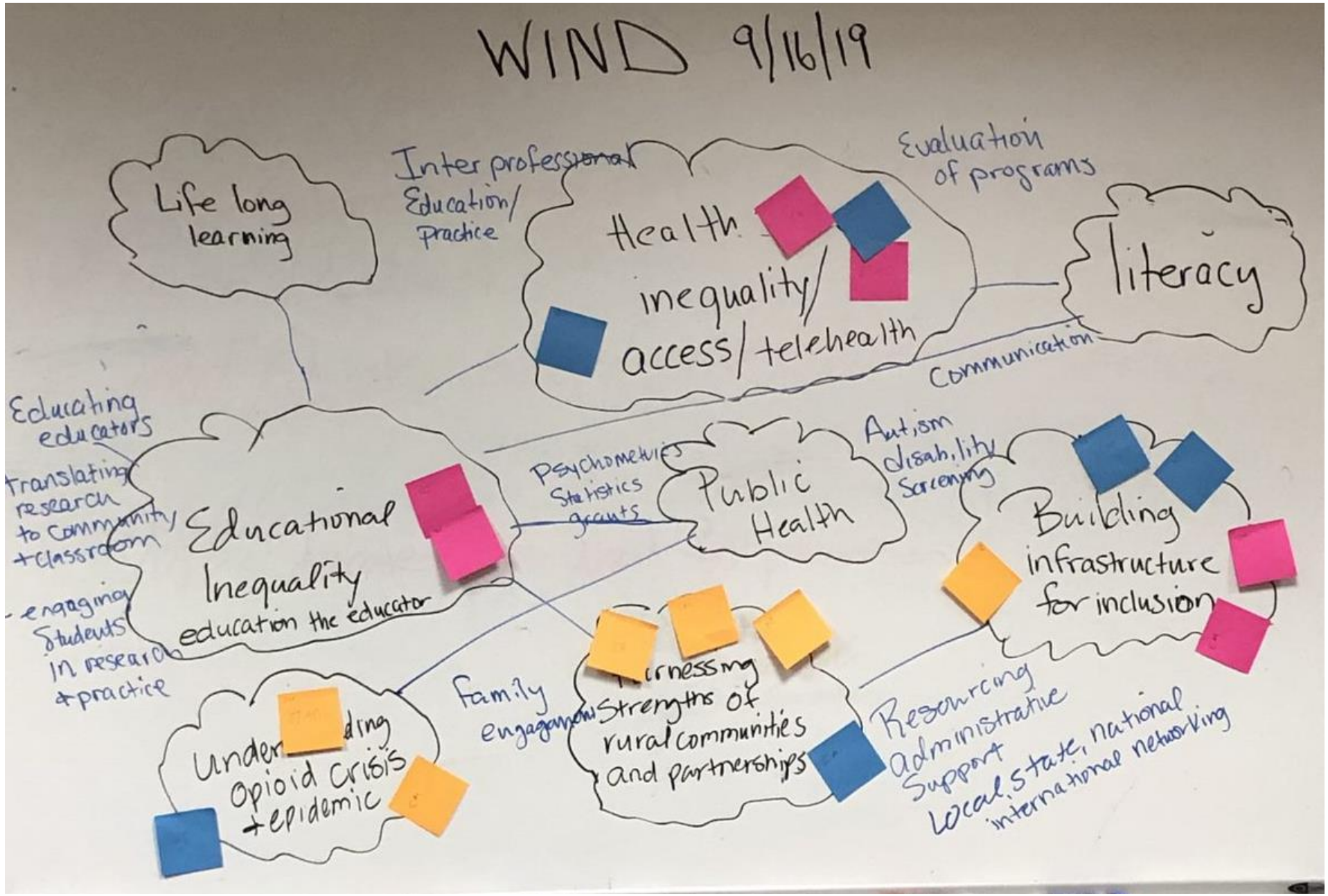
focus on challenges for WY/Rocky Mountain West:

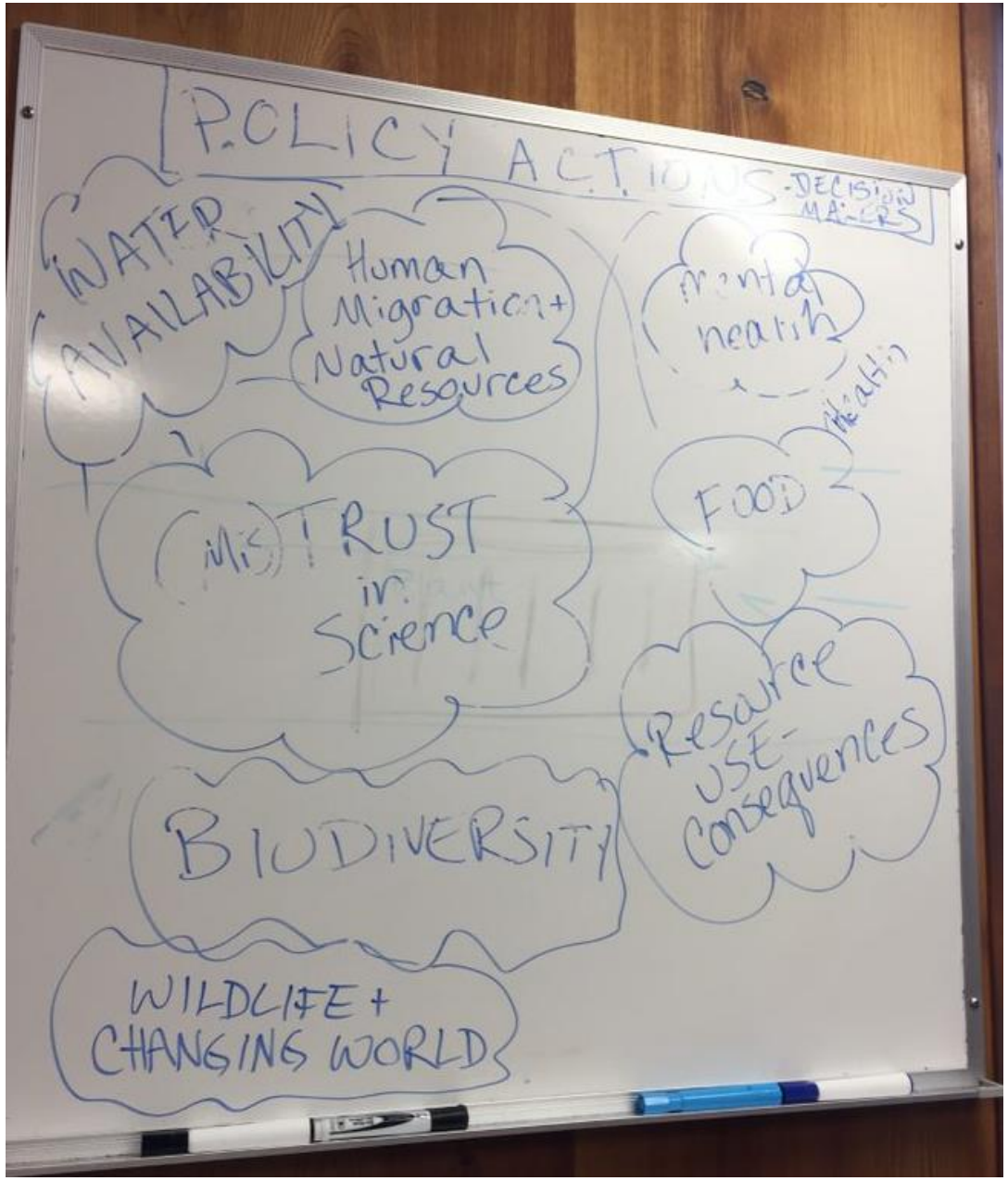
- infectious disease, including emerging and diseases occurring @ human/animal/environmental interfaces
- disease ecology, including wildlife, livestock, pathogen, landscape genomics, impacts of climate change on disease ecology
- global health issues, especially affecting developing countries
- health intersections w/ outdoor recreation, tourism, and WY heritage

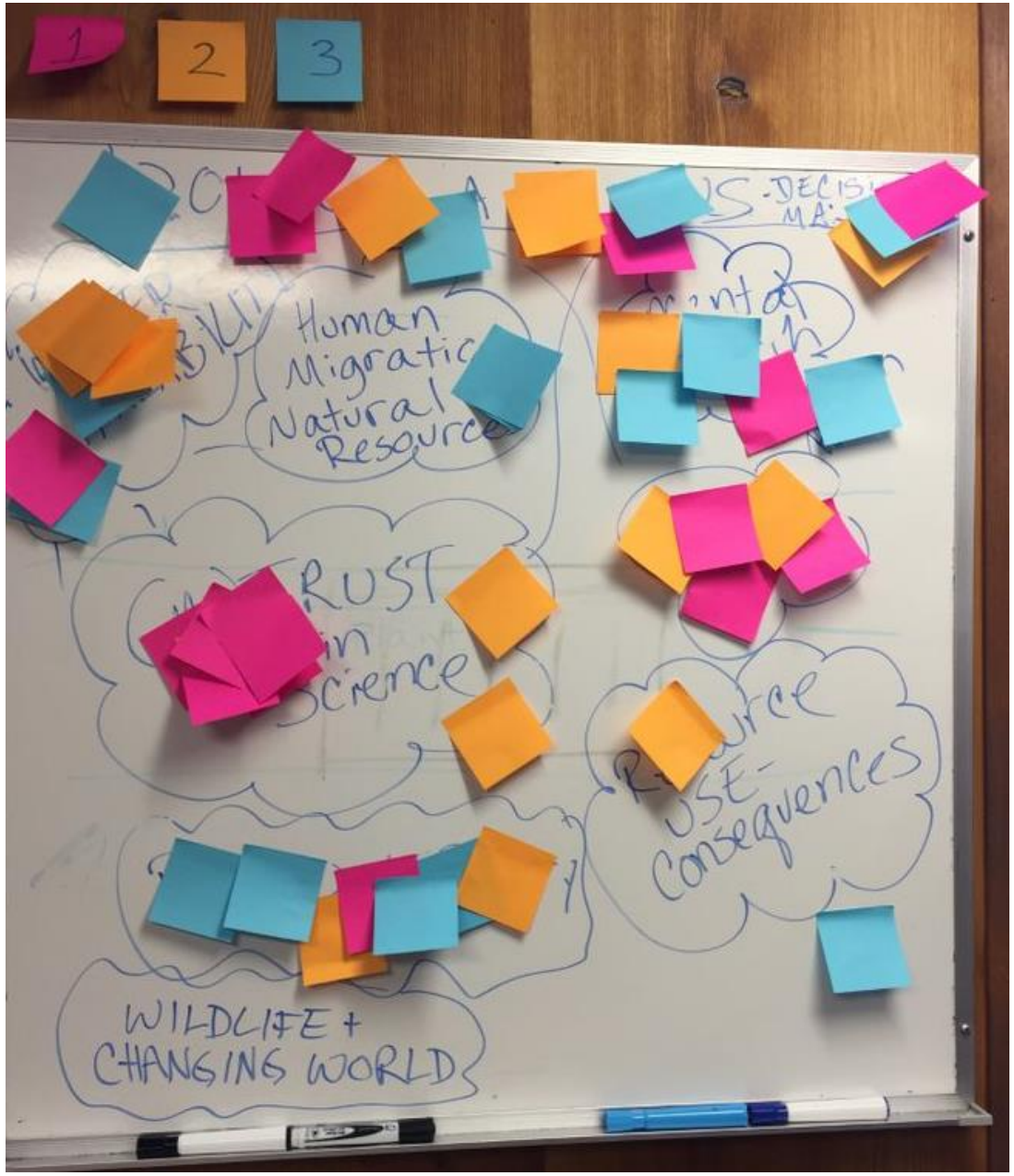
All of the above will involve education, training, engagement/outreach, research, with transdisciplinary experts using a variety of tools


Visual + Literary Arts
Quality of Life Issues
connection + data
rural | access
to arts | more
hubs | public
indigenous,
all ages + communities
opportunities
for 20-50 age group
Arts
against
fascism +
nationalism
change in
energy economy
to/with creative
economy/diversity
of economy
1st place
2nd
3rd
Prison
expansion +
corporatization
mental heath
suicide + access
to guns
the
university
is not a
business
building a network + an
(and adding to)
infrastructure
for creativity + community
(including personal + technological,
and an arts consortium/cartel)
Arts for the
people
Valuing things
that are
qualitative, producing
thinkers adaptive to
change


Visual + Literary Arts
Quality of Life Issues
connection + data
rural | access
Prison
expansion +
corporatization
mental heath
suicide + access
to guns
the
university
is not a
business
Arts for the
people
building a network + an
infrastructure
(and adding to)
(including personal + technological,
and an arts consort
Valuing things
thinkers adaptive to
1st
2nd
3rd


WIND 9/16/19
Life long learning
Inter professional Education/ practice
Health inequality/ access/ telehealth
Evaluation of programs
literacy
Communication
Educating educators
Translating research to community + classroom
- engaging students in research + practice
Educational Inequality education the educator
Psychometrics Statistics grants
Public Health
Autism disability Screening
Building infrastructure for inclusion
Family engagement
Strengths of rural communities and partnerships
Resourcing administrative Support local, state, national international networking
Understanding Opioid crisis + epidemic


POLICY ACTIONS
DECISION MAKERS
WATER AVAILABILITY
Human Migration + Natural Resources
mental health
FOOD
(MIS) TRUST in Science
Resource USE-Consequences
BIODIVERSITY
WILDLIFE + CHANGING WORLD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Human Migratic Natural Resource
RUST in Science
USE-Consequences
WILDLIFE + CHANGING WORLD

Safety
Changing Industries
What can we do w/ the population that we have
• Continuing education
• Career skills for new industry
• Health
Media Coverage & Career
How Wy Communities are adapting to Change
• diverse economics + industries
• Water use
• Health
• Anxiety / Mental Health communication
• Career skills
• Religious studies
• risk comm
• Supporting people of color
• Changing journalism industry
Expanding Wy Horizons
• metaphorically
• globally engaged
Women + people of color
• Service access
• education
• wage gap
Social Justice
Poverty & unmet needs
health
domestic violence
Journalism + media mgmt
Implementation + Supporting rural communities and people
• Communication structure
• access to services
• Supporting smaller local news organizations getting our news
• trust in communication systems
Supporting Diverse Industries
• How diverse and educated our population is
• Supporting domestic people of color
education & culture
Communication
Hure & tourism
• transportation
• communication to international people
• improving communication w/ international ppl
Immigration
• Supporting diversity
Communication Apprehension
Fan Comm
Business
Journalism & commissioning
Gov
Gov