CLIMATE LITERACY AND ACTION IN ARCHITECTURE EDUCATION

AASA AGM | 29-09-2021

PROFESSOR CHRIS KNAPP
DR LIZ BROGDEN

// ON BEHALF OF
ASSOCIATE PROFESSOR PHILIP OLDFIELD
ASSOCIATE PROFESSOR DAGMAR REINHARDT
PROFESSOR NAOMI STEAD
DR NAIMA IFTIKHAR
CLIMATE LITERACY AND ACTION IN ARCHITECTURE EDUCATION

OVERVIEW

PROFESSOR CHRIS KNAPP, BOND UNIVERSITY
ASSOCIATE PROFESSOR PHILIP OLDFIELD, THE UNIVERSITY OF NEW SOUTH WALES
ASSOCIATE PROFESSOR DAGMAR REINHARDT, THE UNIVERSITY OF SYDNEY
PROFESSOR NAOMI STEAD, MONASH UNIVERSITY

PHASE 1
SCOPING STUDY
PRELIMINARY DATA

PHASE 2
EXPANDED TEAM:
DR LIZ BROGDEN, QUEENSLAND UNIVERSITY OF TECHNOLOGY
DR NAIMA IFTIKHAR, QUEENSLAND UNIVERSITY OF TECHNOLOGY

PHASE 3
IN DEVELOPMENT:
CO-PARTNERSHIP WITH AASA & AUSTRALIAN INSTITUTE OF ARCHITECTS

FORMATION OF AASA
CLIMATE ACTION WORKING GROUP

PILOT SURVEY LAUNCH, SEM 2, 2020

MAIN SURVEY LAUNCH, SEM 2, 2021
AASA WEBINAR SERIES, NOVEMBER

TBC - CURRICULUM / PEDAGOGY
FRAMEWORK DEVELOPMENT

2019

2020

2021

2022
PHASE 1
PILOT STUDY
PILOT SURVEY 2020

VALUES AND BELIEFS

VIEWs ON HOW PROGRAMS ENGAGE WITH THE ISSUE OF CLIMATE CHANGE.
WHO IS ENGAGED? TO WHAT EXTENT?
ARCHITECTURE'S ROLE IN CLIMATE CHANGE.

UNIVERSITY ACTIVITY

PEDAGOGY //
CURRICULUM //
RESEARCH //

WHAT IS NEEDED?

WHAT INFORMATION IS SOURCED? WHERE FROM?
VALUABLE WEBINAR TOPICS
HOW ENGAGED IS YOUR PROGRAM WITH CLIMATE CHANGE?

- VERY DISENGAGED
- DISENGAGED: 2
- NEUTRAL: 12
- ENGAGED: 5
- VERY ENGAGED: 1

60% OF PROGRAMS
How engaged is your program with climate change?

- **Very disengaged**: 2
- **Dissengaged**: 12
- **Neutral**: 5
- **Engaged**: 1
- **Very engaged**: 60% of programs

Who is engaged?

- **Others**: >70% neutral or disengaged
- **Me**: 70% engaged or very engaged

Comparative engagement
HOW ENGAGED IS YOUR PROGRAM WITH CLIMATE CHANGE?

60% OF PROGRAMS

WHO IS ENGAGED?

OTHERS

ME

>70% NEUTRAL OR DISENGAGED

70% ENGAGED OR VERY ENGAGED

90% AGREE OR STRONGLY AGREE

THAT ARCHITECTS CAN BE PART OF THE SOLUTION TO CLIMATE CHANGE
40% WOULD BENEFIT FROM SUPPORT

BUT HOW ARE ARCHITECTURE SCHOOLS TEACHING ABOUT CLIMATE CHANGE AND SUSTAINABILITY?
THE PhD PIPELINE

STRONG NUMBERS OF POSTGRADUATE STUDENTS ENGAGED IN SUSTAINABILITY / CLIMATE CHANGE RELATED RESEARCH ACTIVITY

ARE THERE COMMON TRENDS IN THE TOPICS / METHODS EXPLORED?
RESEARCH

THE PhD PIPELINE
STRONG NUMBERS OF POSTGRADUATE STUDENTS ENGAGED IN SUSTAINABILITY / CLIMATE CHANGE RELATED RESEARCH ACTIVITY

COLLABORATIVE RESEARCH PROJECTS
THIS AREA PRESENTS OPPORTUNITIES FOR CROSS-INSTITUTIONAL AND CROSS-SECTORAL PARTNERSHIP

ARE THERE COMMON TRENDS IN THE TOPICS / METHODS EXPLORED?

WITH WHICH PARTNERS / INDUSTRIES ARE Architects ENGAGING MOST FOR RESEARCH IMPACT IN THIS AREA?
THE PhD PIPELINE
Strong numbers of postgraduate students engaged in sustainability / climate change related research activity

COLLABORATIVE RESEARCH PROJECTS
This area presents opportunities for cross-institutional and cross-sectoral partnership

RESEARCH FUNDING SOURCES
This area attracts a variety of funding sources – both internal and external

- Are there common trends in the topics / methods explored?
- With which partners / industries are architects engaging most for research impact in this area?
- Category? Type? Amount? What are the patterns?
BACKGROUND
SITUATING THE STUDY
CURRENT CONTEXT

+ FEDERAL, STATE AND LOCAL GOVT SHIFTS
+ NCC REVIEW
+ ABCB GLOBAL RESILIENCE DIALOGUE
+ CSIRO FUTURE CLIMATE SCENARIO DATA
+ THE INSTITUTE COMMITMENT TO ZERO CARBON
+ NSCA REVIEW
“Art makes the science more accessible, and science makes the art more meaningful. Together they communicate the facts about climate change in a unique and powerful way.”

Alisa Singer
A3.5

“HUMAN ACTIVITY HAS LIKELY INCREASED THE CHANCE OF COMPOUND EXTREME EVENTS.”

— IPCC AP6 REPORT, 2021
WHY DOES THIS MATTER TO ARCHITECTURE?

CLIMATE CHANGE = MORE HAZARDS
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HAZARDS + VULNERABILITIES = DISASTERS
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RESILIENT DESIGN = DISASTERS
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HAZARDS + VULNERABILITIES = DISASTERS

RESILIENT DESIGN = DISASTERS
“EARTHQUAKES DON’T KILL PEOPLE, BUILDINGS DO.”

— SHIGERU BAN
Youth participants uniformly said climate change has affected their mental health.
"A GENERATION DISRUPTED"

THE DELOITTE GLOBAL MILLENNIAL SURVEY (2019)

- 13,000+ MILLENNIALS & 3,000+ GEN Z FROM 42 COUNTRIES.
- CLIMATE / ENVIRONMENT IS BOTH GENERATIONS’ TOP CONCERN.
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• CLIMATE / ENVIRONMENT IS BOTH GENERATIONS' TOP CONCERN.

Sustainability ‘more important than location’ for mobile students

THE survey finds applicants are just as likely to rate university sustainability and graduate employment prospects as top priorities

April 16, 2021
Ellie Bothwell
Twitter: @elliebothwell

CLIMATE CHANGE IS DISTORTED BY MAINSTREAM MEDIA.

MENTAL HEALTH MUST BE A CONSIDERATION IN “CRISIS SUBJECTS”

EDUCATORS NEED TO FIRST ADDRESS THEIR OWN EMOTIONAL RESPONSES TO CLIMATE CHANGE.

NOT ONLY ABOUT CURRICULUM CONTENT BUT PEDAGOGICAL APPROACHES THAT CONSIDER THE AFFECTIVE DIMENSION

MATERIAL SHOULD FOSTER EMPOWERED DECISION-MAKING, ENGAGED CITIZENSHIP AND COLLECTIVE ACTION.
THE SOLUTION

WHAT DOES THE RESEARCH SAY?
WE NEED TO BE SYSTEMS-THINKERS
WE NEED RESOURCES TO BUILD CONFIDENCE
WE NEED TO BE FUTURE-FOCUSED

- BACKCASTING
- SPECULATIVE DESIGN
- DESIGN NARRATIVES
- ALTERNATIVE FUTURES
- QUESTIONING DOMINANT NARRATIVES
WE NEED TO BE COLLABORATIVE
... AND INTERDISCIPLINARY

SYSTEM THINKING
- Seeing how everything is connected and interdependent
- Finding the root of the problem
- Bringing together marginalised voices and new perspectives, ensuring that all stakeholders - human and natural - are involved
- Holding complexity and expanding the brief
- Working at different levels
- Connecting to and learning from nature

LEADING AND STORYTELLING
- Encourage people to think more broadly and more hopefully
- Develop wider concepts of value and measure and demonstrate them
- Create stories about why these issues are important and relevant to the work and then to gain buy-in from all levels

DESIGNING AND MAKING
- Design products, places and services that make it easy and desirable to live sustainably - that are circular, regenerative and learn from nature
- Designing policies, clear frameworks and parameters for decisions, and that provide a more equal playing field for different voices
- Producing in depth knowledge about what works technically and from nature

CONNECTING AND CONVENING
- Connecting different interventions at different levels
- Connecting partners to create greater ambitious or market demand
- Connecting people with shared goals, designing the platform and movements that bring them together from which further innovations can emerge
WE NEED TO SEE OURSELVES AS INTEGRATED
CLIMATE RESILIENCE

+ ZERO CARBON CONSTRUCTION
+ SUSTAINABLE MATERIALS
+ INDIGENOUS KNOWLEDGE
+ HISTORY AND THEORY
+ EQUITY AND INCLUSIVITY
+ ADVANCED MANUFACTURING
+ GOVERNANCE AND POLICY
+ BUILDING SCIENCE
+ ETC
NEXT STEPS

PHASE 2
WHERE TO FROM HERE?

1. CLIMATE LITERACY & ACTION SURVEY
   Open until Tuesday 12th October

2. AASA WEBINAR SERIES
   Webinar 1: Friday 12th November, 2021
   Global Climate Literacy and Action in Architecture Education
   Webinar 2: Friday 26th November, 2021
   Australian Climate Literacy and Action in Architecture Education

3. Phase 3
   In development:
   Co-partnership with AASA & Australian Institute of Architects

OVER TO YOU

WE ARE SEEKING RESPONSES FROM:

+ FACULTY STAFF
+ ARCHITECTURE STUDENTS
+ SESSIONAL ACADEMICS
+ PhD / POSTDOC RESEARCHERS

SEE LINK IN CHAT WINDOW
https://qsurvey.qut.edu.au/jfe/form/SV_eFf1pKXh9UqQuAC