THE BASS CONNECTIONS MODEL: INTEGRATION OF RESEARCH, TEACHING & ENGAGEMENT

Interdisciplinary research teams tackle complex societal challenges defined by three core connections:

1. Across areas of disciplinary expertise
2. Across learner levels (undergraduate, master/professional, doctoral and medical students)
3. Between the academy and the broader world.
<table>
<thead>
<tr>
<th>Project Teams</th>
<th>Courses</th>
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<tbody>
<tr>
<td>• 58 teams in 2018-19 &gt; 420+ undergraduates; 145+ graduate students; 180+ faculty; 45+ external partners</td>
<td>• ~ 35 affiliated courses each year</td>
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<td>• 64 teams in 2019-20 (inc. 4 Florence teams)</td>
<td>• Incorporate elements of the model: team-based, applied learning; interdisciplinary inquiry; vertical integration</td>
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<tr>
<th>Summer Research Experiences</th>
<th>Linked Experiences/Capstone Work</th>
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<tr>
<td>• Story+</td>
<td>• Follow-on research grants</td>
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<td>• Data+</td>
<td>• DukeEngage, DukeImmerse</td>
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<tr>
<td>• Summer Neuroscience Program</td>
<td>• Master’s projects</td>
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<tr>
<td>• Global Health Student Research Training Program</td>
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THEMES

Global Health

- David Boyd (Duke Global Health Institute)
- Mary Story (Community & Family Medicine)
- Lysa Mackeen (Duke Global Health Institute)

Energy & Environment

- Lori Bennear (Nicholas School of the Environment)
- Bryan Koen (Duke University Energy Initiative)
THEMES

Brain & Society

Walter Sinnott-Armstrong (Philosophy, Ethics)
Len White (Neurology)
Tyler Lee (Duke Institute for Brain Sciences)

Education & Human Development

Anna Gassman-Pines (Sanford School of Public Policy)
Amy Finnegan (Social Science Research Institute)
THEMES

Information, Society & Culture

Robert Calderbank (Computer Science; Rhodes Information Initiative at Duke);
Victoria Szabo (Art, Art History & Visual Studies);
Kathy Peterson (Rhodes Information Initiative at Duke);
CENTRAL PROGRAM OFFICE/BASS CONNECTIONS OPEN

Ed Balleisen, Vice Provost for Interdisciplinary Studies

Laura Howes, Director

Sarah Dwyer, Director of Communications

Meghan O’Neil, Assistant Director
ROLES: THEMES

- Coordinate review of project proposals
- Onboard faculty and students; best practice sharing across teams
- Communicate key timelines, events, policies to teams
- Provide support and advice; connect teams to resources
- Administer academic credit
- Oversee financial administration
- Create opportunities for teams to share their work (varies by theme)
ROLES: CENTRAL OFFICE

• Oversee student recruitment and tracking of student participation
• Run program-wide events, awards, and student funding opportunities
• Set program-wide policy/guidance
• Communicate team successes internally and externally
• Create resources to address common challenges and support best practices
• Conduct annual program evaluation and long-term outcome tracking
• Administer Bass Connections Open projects
GENERAL OPERATING PRINCIPLES FOR TEAMS

• **Length**: 9 to 12 months (with possibility of continuing)

• **Course credit**: Primarily *research* independent study
  - Exceptions: advanced graduate students; no-credit options
  - Workload = 10 hours per week
  - Attendance expectations
  - Grading practices and rubrics

• **Team structure**: Intact team vs. sub-team models

• **Team meetings**:
  - At least once a week
  - Set time in advance! (try to avoid spanning multiple *class periods*)
  - Space can be arranged by departments, with Duke Libraries, or through themes

• **Project managers**
ELEMENTS OF TEAM SUCCESS

1. Shared, clearly defined goals for the project
   • Team charter
   • Provide scaffolding but also engage students in goal setting
   • Team and individual goals

2. Foundation setting
   • Resources to help students get up-to-speed
   • Horizontal and vertical mentoring models

3. Clear roles and expectations for participation and engagement
   • Team charter
   • Grading rubric
   • Team ground rules & relationship building

4. Regularly scheduled and well-organized meetings
   • Schedule in advance
   • Meet at least weekly
ELEMENTS OF TEAM SUCCESS

5. Team leader engagement and partnership
   • Team leaders attend meetings
   • Team leaders communicate shared messages to students

6. Layered mentorship/leadership roles for graduate students (or advanced undergraduates)
   • Project managers
   • Sub-team leads
   • Technical leads

7. Student Ownership
   • Engage students in direction-setting & problem-solving
   • Expect student initiative but provide scaffolding
   • Provide rich research experiences

8. Opportunities for reflection and presentation
   • Blogs, journals, portfolios
   • Formal and informal presentations
RESOURCES

• Team Resource Center
• Project manager trainings
• Themes
• Duke Libraries:
  • Workshops
  • Subject matter and research specialists
  • Data consulting
  • Data visualization & digital project support
• Social Science Research Institute:
  • ModU (videos on social science research methods)
  • Data security and management
  • Workshops
  • Help desk
  • Custom training and consulting
• Foundations of Engagement Program
OUTPUTS & OUTCOMES

• Your team defines success
• Failure (of outcomes) is an option
• Outputs and outcomes are wide-ranging:
  • Policy/white papers
  • Publications
  • Conferences, events, symposium
  • Prototypes
  • Algorithms
  • Data collection/Data analysis
  • New processes
  • Exhibits
  • Websites
  • Grant submissions
THREE LEVELS OF IMPACT

- Short-term: Project outputs & impact on student trajectories
- Medium-term: Impact on teaching, scholarship, communities
- Long-term: Alumni outcomes
BASIC EXPECTATIONS

• Successful student recruitment; including undergrads
• Meet student selection deadlines
• Inform your theme of any travel involving students
• Notify us of roster changes
• Communicate with us about issues and successes
• Follow standard academic policies
• Stay within budget
• Recognize Bass Connections in publications, conferences, etc.
• Participate in the Bass Connections showcase
• Participate in evaluation survey
• Share end-of-year outputs and long-term outcomes
STUDENT RECRUITMENT

• Bass Connections Fair: Jan. 22 from 2:00-4:30, Penn Pavilion
• Student applications: Jan. 22 to Feb. 15 at 5:00
• Teams make selections/offers by March 6
• Students respond to offers by March 19
• Teams make offers to second round candidates by March 20
• Students respond to second-round offers by March 25
• All student selection completed by March 26
STUDENT APPLICATIONS

• Collected centrally via “AwardSpring”
  • Each team designates a primary POC for selection
  • Applications received directly by the team
• Students may apply to up to three teams – only participate on one
  • May hold a few students in reserve; don’t over use this option!
• Teams can:
  • Select based on application alone
  • Conduct interviews
  • Check references
  • Seek additional information via email
• Rejections sent centrally
• Can add students off-cycle (esp. grad students) – let us know!
STUDENT FAIR: QUESTIONS TO PREPARE FOR

• What types of skills/backgrounds are you seeking for the team?
• What roles do you envision for students? How will students contribute and what will they gain?
• When and how will the team meet?
• Does your project include summer research?
  • If yes: Is it mandatory?
• Does the project include travel?
  • If yes: Will all students have the opportunity to travel? When will travel take place?
• Do you have paid roles for graduate students (e.g., project manager/TAs)?
• Do I have to participate the whole year? What if I’m studying abroad?
• Will I receive credit? What is the time commitment?
SETTING EXPECTATIONS EARLY

• Set a meeting time before forming the team or before student registration
• Consider using interviews to provide students a “realistic job preview”
• Consider a spring kick-off meeting
• Set clear expectations for attendance at meetings and participation on the team
• Don’t oversell
FINANCE

• Funding period: July 2019 - June 30, 2020

• Themes will provide a designated fund code

• Transactions processed by faculty’s home departments

• Students generally set up on department payrolls – standard rates and payroll processing (see hourly rates for all students & info about PhD non-hourly positions)
  • May not pay and offer credit for same work

• May not charge faculty time to projects/unbudgeted staff time

• Unspent funds will be returned at end of year; extensions available for continuing work with students

• Be mindful of asking students to incur expenses
Bass Connections Central & Bass Connections Open

bassconnections@duke.edu

Brain & Society

Theme Administrator: Tyler Lee (Duke Institute for Brain Sciences)

Information, Society & Culture

Theme Administrator: Kathy Peterson (Rhodes Information Initiative at Duke)

Global Health

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