

## **Team Teaching Collaborations in Building Connections**

Co-teaching is widely recognized as an instructional strategy for promoting interdisciplinary learning. Cross-disciplinary team teaching, bringing faculty from different disciplines together to design and co-teach a curriculum, is a pedagogical practice particularly well-aligned to the advancement of interdisciplinary learning outcomes (De Greef et al., 2017; DeZure, 2017; Klein, 2009; Newell, 2019; Plank, 2013). The new Building Connections (BC) component of UA's general education curriculum necessitates the development of new organizational mechanisms and course structures which promote collaborative faculty teaching partnerships in general education. Nurturing these team-teaching collaborations will be a critical component of the success of BC.

Teaching and learning reforms in higher education have fueled demand for active learning environments and student-centered instruction, creating greater interest in the possibilities of-teaching partnerships to foster engaged learning (Metzger, 2015). Our aim is to make it easier for faculty to come together to design and implement BC courses which emphasize interdisciplinary thinking and approaches. To do we are proposing a shell 'topics course' which faculty across different departments can use to 'house' co-instructed courses. The purpose of this document is to 1) communicate the value of team teaching in interdisciplinary learning environments and 2) synthesize what the existing scholarship tells us about the challenges and advantages of using team teaching approaches from the perspective of both students and faculty. We do this to provide justification for why new mechanisms which encourage faculty collaboration are essential to realizing the educational vision of gen ed, and to provide insights and lessons learned from others to inform our practice and provide instructional support.

### **Team Teaching to Advance Interdisciplinary Learning**

“A critical influence on the delivery of an interdisciplinary curriculum is whether the course is taught by a single instructor or by a collaborative team of faculty. The greater the integration demanded the greater the need for faculty collaboration” (Holley, 2009, p. 50).

Collaborative teaching partnerships are a key feature of interdisciplinary curricular initiatives. Team teaching ensures students are presented with different disciplinary perspectives “accurately and convincingly” (Newell in Katz, 2015, p. 2), and uniquely allows instructors from different disciplines to engage students in the practice of viewing topics from a variety of perspectives and integrating these diverse insights (De Greef et al., 2017; Dezure, 2017, Holley, 2009). The following summarizes the advantages of using team teaching models to promote interdisciplinary learning within three key processes:

- (1) ensures that multiple (informed) disciplinary insights will be present in the course
- (2) encourages learners to make connections and develop more comprehensive understandings of topics through the incorporation of multiple perspectives
- (3) allows instructors to model interdisciplinary discussion, debate, and integrative thinking for learners

<p><i>Ensures multiple (informed) disciplinary insights will be present in the course</i></p> <ul style="list-style-type: none"><li>- ensures that different disciplinary perspectives are accurately and convincingly presented to students</li><li>- allows faculty to draw on their respective expertise as they approach a problem from the lens of their discipline</li><li>- breaks students from mono-discipline thinking and exposes them to the strengths of multiple viewpoints</li></ul>
<p><i>Encourages learners to make connections and develop more comprehensive understandings of topics through the incorporation of multiple perspectives</i></p> <ul style="list-style-type: none"><li>- allows students to witness how experts from different disciplines approach issues</li><li>- encourages an examination of the reductionist perspectives of each contributing discipline</li><li>- allows for a deeper and more extensive analysis of the problems as students and instructors explore multiple perspectives and make new connections</li><li>- students learn how to incorporate info from an alternative discipline into their own field of study</li></ul>
<p><i>Allows instructors to model interdisciplinary discussion, debate, and integrative thinking for learners</i></p> <ul style="list-style-type: none"><li>- instructors can look at each concept from their own disciplinary viewpoints and discuss/model perspective-taking and integration in class</li><li>- instructors can discuss and debate problems in class, modeling interdisciplinary dialogue and collaboration</li><li>- instructors can model the complex intellectual task of integrating the insights of different disciplines and negotiating integrative solutions, and share the difficulties and richness of this process</li><li>- students can observe the unscripted interactions among faculty of diverse disciplines</li></ul>

## **Benefits for Instructors**

### *Professional development*

- encourages faculty to explore alternate disciplinary perspectives themselves and make new connections alongside students
- an opportunity to learn about other fields and methodologies
- Unique opportunity to share, critique, confront and cooperate

### *Learn new teaching methods*

- Keeps instructors from “slipping into” a passive learning style
- allows faculty to examine their peers in action and learn new ideas
- requires faculty to communicate their teaching decisions in the classroom and have their reasoning questioned; this process can change the way they approach teaching

### *Building new connections with colleagues*

- Research has documented how teaching partnerships strengthen collegial relationships (including cross-departmental) and ease isolation

### *A transformative and creative opportunity*

- a transformative, exhilarating experience when done well
- an opportunity to be creative with new course design and teaching practices

## Potential Drawbacks for Instructors

### *Time investment*

- Can take more time than solo teaching, particularly during the planning phase, and require dramatic changes to existing syllabus

### *Uncertainty as to whether investment is of added value to academic career*

- Interferes with research (additional time)
- promotion and tenure structures prioritize research over instructional work

### *Funding concerns and departmental pushback*

- not an efficient use of instructional resources
- effective interdisciplinary team teaching can require additional faculty training
- having multiple instructors teach the same course is costly. “Why pay to have two teachers in the classroom when one will do?” (Plank, 2013, p.1).

### *New classroom dynamics which can create conflict*

- conflict can arise if roles unclear or not agreed up
- requires faculty to give up their role as “sage on the stage”
- lack of coordination and communication can weaken professional relationships
- faculty partners may have differing educational philosophies and assumptions about interdisciplinarity
- science-humanities pairings may be particularly challenging due to disciplinary incompatibilities and contradictions, lack of shared background, unbalanced course designs which prioritize certain methodologies and ideas over others, and differing assumptions about interdisciplinarity itself

### *Loss of flexibility*

- can be challenging for instructors to give up the flexibility that solo instruction affords. faculty usually have a high level of autonomy and their classroom decisions are informed by their personal philosophies about teaching and learning and their previous experiences in the classroom. Working with another faculty member who may have different beliefs and experiences disrupts the assumption of autonomy

### *Gender and other identities distinctly shape classroom dynamics*

- puts relationships on display, and students often interpret these relationships using the stereotypical patterns in which they are most familiar (e.g., husband/wife, good cop/bad cop, or boss/underling)
- students also bring their preconceived notions about different disciplinary fields

## Student Experiences with Team Teaching

While research on students experience with team teaching in interdisciplinary learning environments is limited, studies examining students’ experiences have found:

- *Highly varied experiences*
  - both an overwhelming preference for team teaching over traditional teaching (Hinton & Downing, 1998), as well as a preference for a traditional single instructor approach (Self & Baek, 2017).

- positive experiences with collaborative interdisciplinary teaching models (Looft & Myers, 2019; Metzger, 2015), while others have described confusing, disorganized, and unsettling experiences (Davis, 1995; Maharajh, Davids, & Khoza, 2013; McDaniel and Colarulli, 1997; Yanamandram & Noble 2006).
- within the same team-taught course some students report that variations in teaching style improved their learning and encouraged them to attend lectures, while others indicate that there were too many variations in teaching styles and that this was detrimental to their learning environment
- Students identify increased ease of having questions answered and receiving assistance, relationship building with instructors, improved efficiency, and allowing for multiple perspective to be brought into the classroom as benefits of having multiple instructors in the interdisciplinary learning environment (Metzger, 2015).
- From a faculty perspective, Letterman & Dugan (2004) identify the following benefits for students who participate in team-taught courses
  - Improved teacher-student relationships
  - Student preference; more interesting and challenging
  - Improved learning outcomes
  - Higher achievement, retention, interpersonal skills
  - Social and communication skills
  - Can promote diversity (from academically varied disciplines as well as different ethnic, racial, cultural backgrounds)

## Models of Team Teaching in Higher Education

Team teaching: “All arrangements that include two or more faculty in some level of collaboration in the planning and delivery of a course” (Davis, 1995, p.8). While team teaching arrangements take many forms there are four particularly common course-level approaches: interactive, rotational, participant-observer, and team coordination.

- **Interactive:** characterized by two or more instructors teaching simultaneously in front of the class and co-facilitating class discussions and activities.
- **Participant-observer:** when participating faculty attend classes together, but the structure is organized so that one instructor is leading and the other/s plays an alternate role such as observer, panel member, class resources, or model learner.
- **Rotational:** most common approach in higher education characterized by a rotating formation in which one instructor is present at a time. Instructors might switch off daily, weekly, or lead different units. This structure might also be referred to as a ‘tag rotation approach’

- ***Dispersed team model***<sup>1</sup>: a team of faculty divides a large class into small sections, meets separately on some days and then periodically come together as a whole class “to share ideas and explore integration and intersections” (McDaniel & Colaruli in Plank, 2013, p. 2).

### **Which approach is best?**

Each model presents distinct opportunities and tradeoffs. In terms of advancing interdisciplinary learning, a fully interactive the model will afford greater opportunities to model interdisciplinary discussion, debate, and integrative thinking for learners, which is perhaps the greatest value that team teaching offers. Unsurprisingly, previous research suggests that a more interactive model is most effective for interdisciplinary student learning (Luckie et al., 2012). However, participant-observer modules can be useful for minimizing potential conflict in the classroom and delegating tasks for a more organized learning experience, and a rotational approach might be a creative way to help faculty circumvent departmental or funding barriers. As articulated in an idea paper on team teaching, “Success is not inherent in the method but depends on how it is designed and implemented” (Plank, 2013, p.2). Regardless of the model, faculty should aim to be explicit about discussing the connections and integrative processes as research has shown “subtle intellectual and methodological links were generally lost on students” (Luckie et al., 2012, p. 8).

---

<sup>1</sup>This approach is currently being used in team-taught pilot courses currently being developed in the Honors College. Three instructors collectively designed the course with shared learning goals and common assessment mechanisms. However, the larger course consisted of three separate courses each led by a different faculty member (HNRS 150, HNRS 160, HNRS 170). These courses were scheduled on the same days and time of the week to allow for regular co-convening of the sections (every 3-5 classes) in which all students and faculty were brought together in one of the university’s Collaborative Learning Spaces (CLS) to engage in collaborative peer learning activities. In the combined courses an *interactive model* was used where all instructors facilitated class discussions and activities together