



COACHE REPORT

# INTERDISCIPLINARY ENGAGEMENT

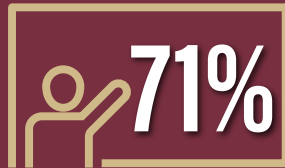
FLORIDA STATE UNIVERSITY

# FSU FACULTY KEY DATA POINTS

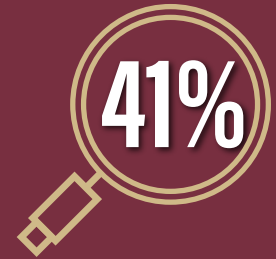
74%



are satisfied with  
**OPPORTUNITIES FOR  
COLLABORATION**  
within their department



are engaged in  
**COLLABORATIVE  
INTERDISCIPLINARY  
TEACHING**

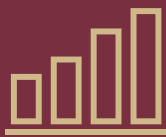


are engaged in  
**COLLABORATIVE  
INTERDISCIPLINARY  
RESEARCH**

## BENCHMARK MEASURES



24% agree that interdisciplinary work is  
**REWARDED IN MERIT**



27% agree that interdisciplinary work is  
**REWARDED IN PROMOTION**



32% agree that interdisciplinary work is  
**REWARDED IN TENURE**



32% agree that departments know how to  
**EVALUATE INTERSICLIPLINARY WORK**

# WHAT IS INTERDISCIPLINARY TEACHING, RESEARCH, AND COLLABORATIONS?

The term interdisciplinary can be interpreted in a variety of different ways. As a working definition of interdisciplinary research and teaching, we refer to a *report* by the National Academies\* and adapt their definition to include teaching:

## DEFINE

**“Interdisciplinary research and teaching is a mode of research or teaching by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice.”**

Interdisciplinary work may be either solo or team-based; either way the aim is to draw from different fields to impact more than one discipline. The COACHE survey pairs interdisciplinary and collaborative work; however, collaborations can be but are not limited to multi- or cross-disciplinary.

The COACHE benchmark for interdisciplinary work and collaboration is measured by faculty satisfaction with:

- opportunities to collaborate with researchers inside and outside home departments or with partners outside the institution
- opportunities to teach collaboratively or team-teach
- opportunities to engage in solo interdisciplinary teaching or research
- budget allocations
- campus facilities
- evaluation of multi-authored research and interdisciplinary publication practices
- recognition of interdisciplinary work in merit, promotion and tenure processes

**For the purposes of this report, we refer broadly to interdisciplinary activities in terms of “engagement” which may include teaching, collaborations, or individual research activities.**

\*Committee on Facilitating Interdisciplinary Research, Committee on Science, Engineering, and Public Policy (2004). *Facilitating interdisciplinary research*. National Academies. Washington: National Academy Press, p. 2.

# OVERVIEW OF BENCHMARK MEASURES

The COACHE faculty job satisfaction survey identifies six items related to interdisciplinary scholarship. These serve as benchmark measures that can be compared to survey ratings from previous years, and from a cohort of peer public research institutions. We refer to this cohort as the “national cohort” for the purposes of comparison in this report.

**Four benchmark items** relate to the way interdisciplinary engagement is rewarded. These items measure how much faculty agree that interdisciplinary work is rewarded in terms of:



**MERIT**



**PROMOTION**



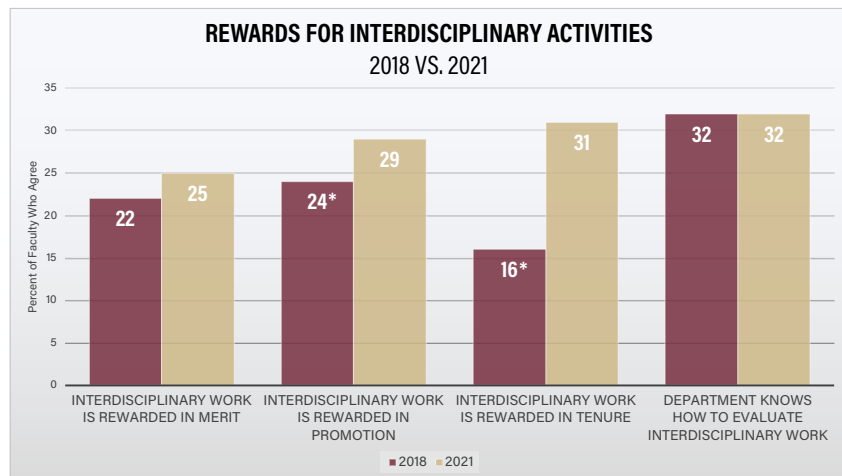
**TENURE**



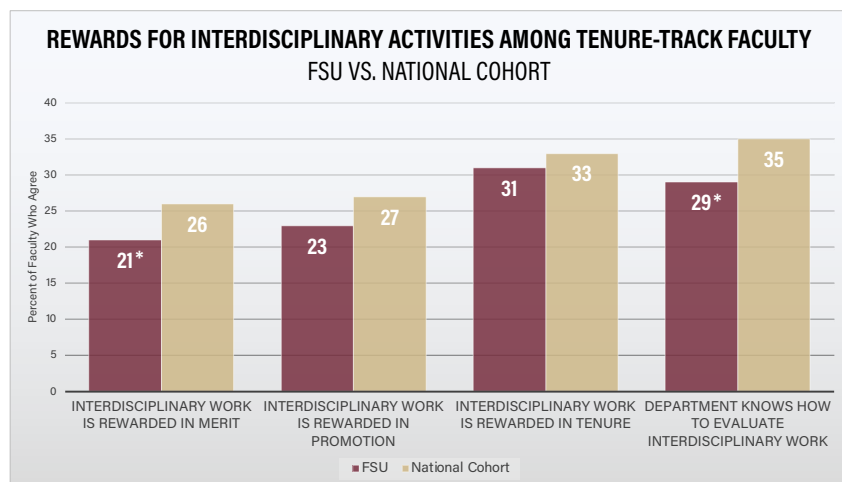
**DEPARTMENTAL  
EVALUATIONS**

Overall, these items had the lowest ratings across all benchmark items in the COACHE survey for both the national cohort and for FSU specifically. On average, fewer than 1 in 3 faculty members (somewhat or strongly) agree that interdisciplinary work is rewarded, and this is true for merit, promotion, tenure, and in departmental evaluations.

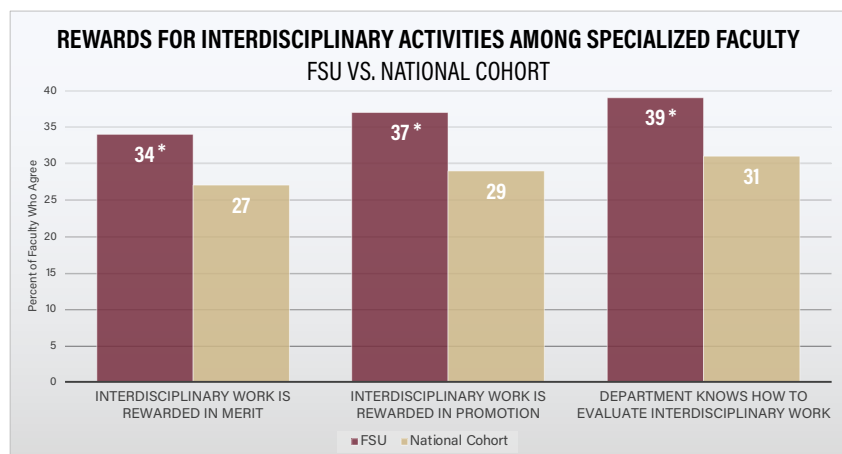
# OVERVIEW OF BENCHMARK MEASURES



*\*Note: Statistical significance indicates a statistically significant difference between faculty at FSU in 2018 versus 2021.*



*\*Note: Statistical significance indicates a statistically significant difference between tenure-track faculty in the national cohort and tenure-track faculty at FSU.*



*\*Note: Statistical significance indicates a statistically significant difference between (non-tenure-track) specialized faculty in the national cohort and specialized faculty at FSU.*

Despite low ratings overall, compared to 2018 when the COACHE survey was previously conducted, the average score across all four items increased at FSU. In this report, we show the proportion of faculty who (somewhat or strongly) agreed that interdisciplinary work is rewarded. There were significant increases relative to 2018 in the proportion of faculty reporting rewards for interdisciplinary work regarding promotion and tenure.

FSU showed comparable rates with the national cohort, but these rates differ based on tenure-track status of the faculty responding. For tenured/tenure-track faculty (TTF), FSU shows comparable levels of agreement with the national cohort regarding interdisciplinary work being rewarded in promotion and tenure. However, relative to the national cohort, a statistically lower proportion of TTF at FSU indicated that they agreed that interdisciplinary work is rewarded when it comes to merit and departmental evaluation procedures.

We also evaluated differences among non-tenure-track “specialized” faculty. Among specialized faculty, FSU had statistically higher rates of agreement than the national cohort in all three categories that were evaluated for this group – merit, promotion, and departmental evaluation. Overall, about one-third of specialized faculty at FSU reported agreement that interdisciplinary work is rewarded in each of these areas.

# OVERVIEW OF BENCHMARK MEASURES

Two benchmark items relate to support for interdisciplinary engagement. Specifically, faculty were asked to indicate the degree to which they agreed:

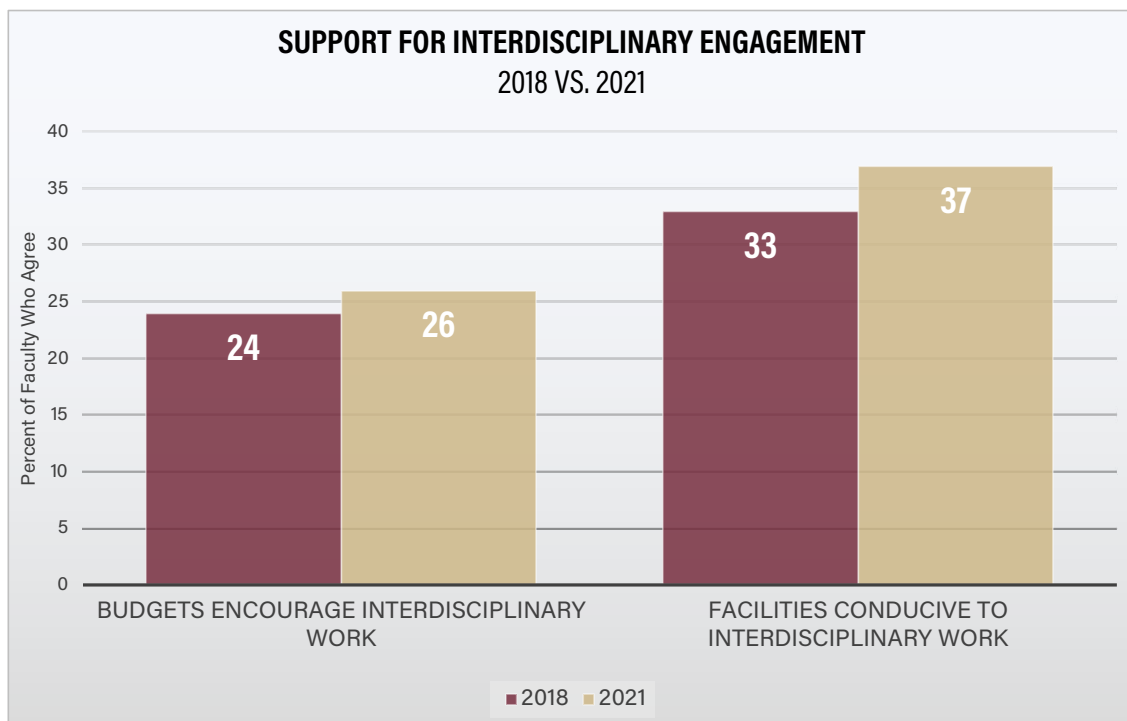


## **BUDGETS** ENCOURAGE INTERDISCIPLINARY WORK



## **FACILITIES** ARE CONDUCTIVE TO INTERDISCIPLINARY WORK

The average ratings on these items were higher in 2021 relative to 2018. However, in evaluating the proportion of faculty who (somewhat or strongly) agree that budgets and facilities support interdisciplinary work, there was not a statistically significant increase.



# RATES OF INTEREST VS. ENGAGEMENT

A key area of interest is the difference between reported *interest* in interdisciplinary activities and reported levels of *engagement*. The COACHE questions assess interest in interdisciplinary activities using a single question that combines research and teaching. It is not possible to parse out interests related to research, teaching, or both. Engagement questions, by comparison, are differentiated into three groups: teaching with faculty in other disciplines, research with faculty in other disciplines, and solo interdisciplinary teaching and/or research. We use these data to identify potential gaps between interest and engagement to evaluate opportunities for supporting faculty interests and goals with interdisciplinary engagement.

## INTEREST

First, we consider *interest* in interdisciplinary activities. We consider “high” interest as 50% or more of faculty indicating an interest in teaching/research with faculty from other disciplines. These include faculty in education, humanities/arts, STEM, and the medical fields. By comparison, only one in three faculty in business/law indicate interest in interdisciplinary activities.

## ENGAGEMENT

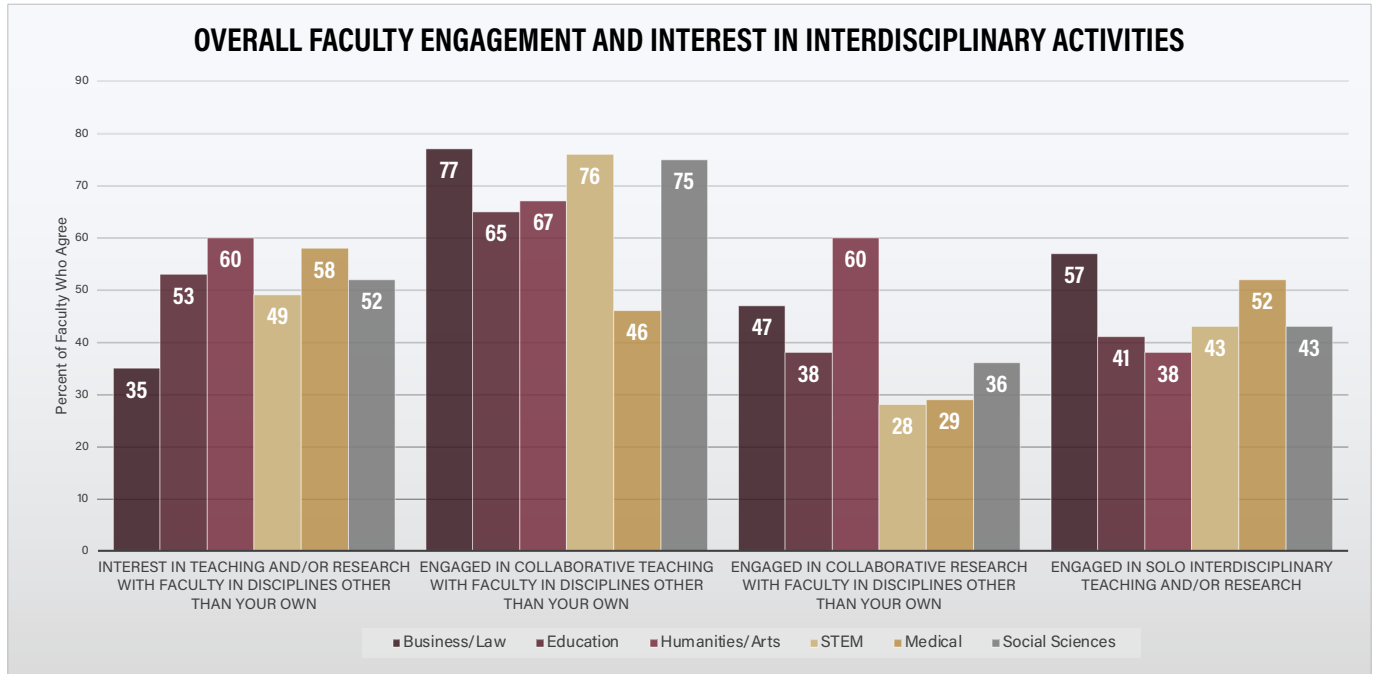
Second, we consider engagement in teaching and research *with faculty in other disciplines*. Although we are unsure what faculty interpret as **collaborative teaching** with faculty in other disciplines (e.g., co-teaching a course, guest lecturing), every disciplinary group except the medical sciences report that at least half of their faculty engages in this activity. Alternatively, less than half of faculty in almost every discipline report **collaborative research** with faculty in other disciplines. The lowest reported participation includes those in the medical sciences (11%), though only one in four education and STEM faculty respectively report participation.

## SOLO WORK

Finally, we evaluate **solo interdisciplinary teaching or research**. Solo interdisciplinary activities are not defined but may include activities that integrate views from multiple disciplinary perspectives, frameworks from more than one discipline, or research published in journals that include multiple disciplinary perspectives. Just over half of business/law faculty report participation, just under half of STEM faculty report engagement, and about 1/3 of faculty in other fields report engagement in this activity.

# RATES OF INTEREST VS. ENGAGEMENT

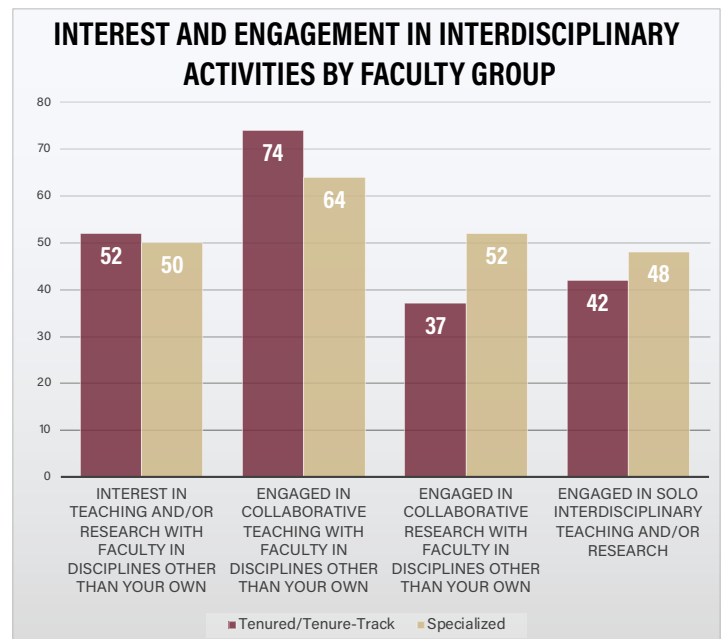
We suggest different fields consider the difference between interest and engagement to identify potential needs. We note two extremes. On the one hand, even though about three out of every four medical faculty report being interested, they also report the lowest levels of interdisciplinary activities. This may indicate a need for more support that facilitates interdisciplinary engagement. On the other hand, fewer than 1 in 3 business/law faculty report interest in collaborative teaching/research, but over 80% report collaborative teaching and about 1/3 report collaborative research. This could mean structural expectations may require more participation in collaborative activities than is preferred.



Note: Disciplinary categories are based on broad groupings due to sample sizes. Certain disciplinary groups were combined to ensure large enough samples and due to responses being very similar across groups.

Interest and engagement also vary by faculty group. We differentiate engagement among TTF and SF. More than half of TTF and SF report interest in collaborative interdisciplinary activities, with higher engagement in interdisciplinary collaborative teaching, and lower levels of interdisciplinary collaborative research, particularly among TTF.

The gap between interest and engagement suggests a potential opportunity for increased participation in interdisciplinary research for TTF and SF. However, future work will be needed to parse out specific gaps between interest and engagement in collaborative activities to more readily determine the kinds of interventions that may be needed to support faculty in specific fields and specific groups.



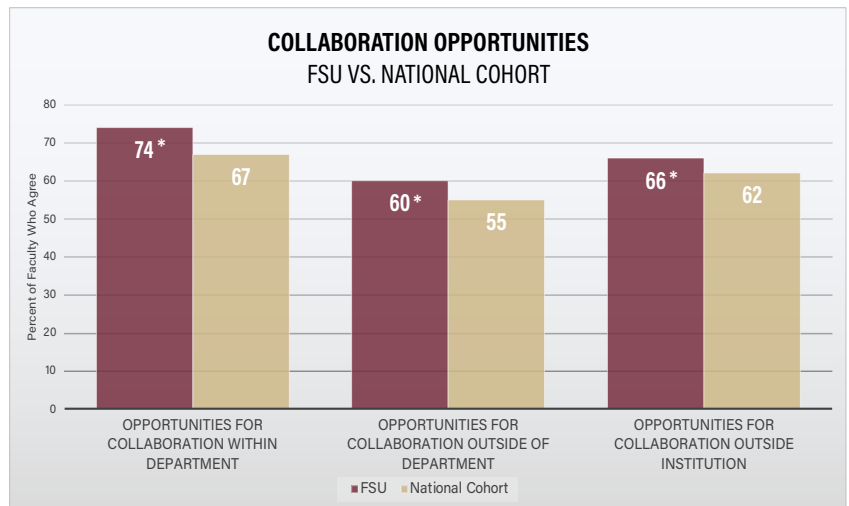


# OPPORTUNITY TO COLLABORATE WITH OTHERS

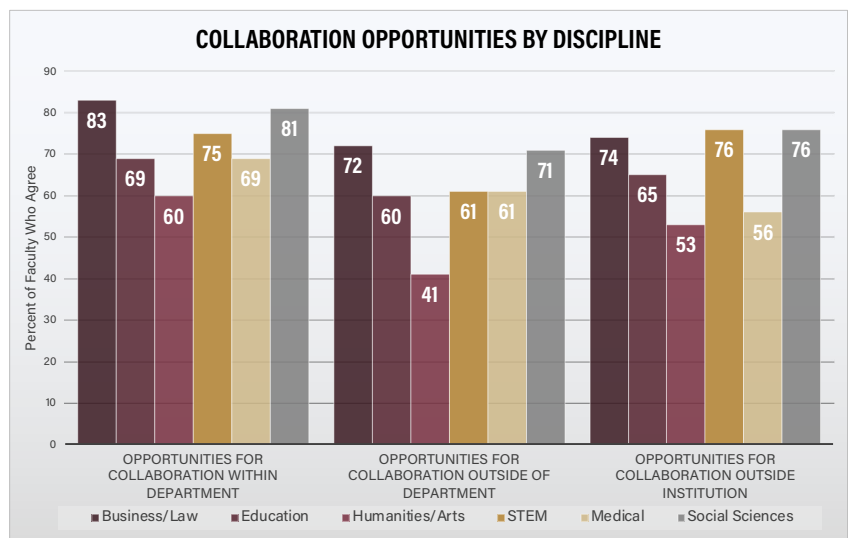
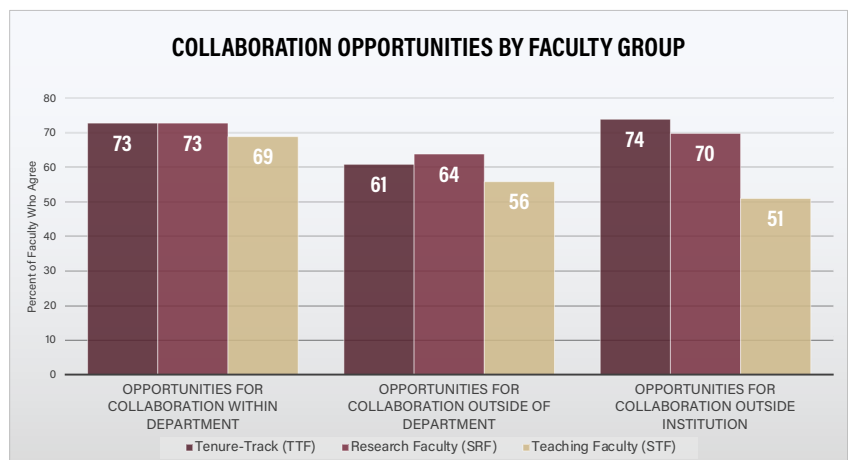
A key pathway for cultivating interdisciplinary activities is through collaborations with others. COACHE does not define what is meant by collaborations, which may include teaching, research, or service-related activities. Faculty were asked to indicate if they agreed that they had opportunities for collaborations within their department, outside of their department, and outside of their institution. Overall, faculty reported relatively high rates of agreement that they had opportunities for these kinds of collaborations, and overall, they report statistically higher rates relative to the national cohort.

However, agreement about these opportunities varies according to faculty group and discipline. We evaluated separately the specialized faculty based on research (i.e., SRF) and on teaching (STF). TTF and SRF reported similarly high rates of agreement about collaboration opportunities. STF reported the lowest agreement overall, particularly regarding collaboration opportunities outside of FSU. Despite the lower rate for this group, more than half of STF did report that they had opportunities for collaboration within their department, outside their department, and outside of the institution.

Opportunities for collaboration are relatively high regardless of discipline. Humanities/arts faculty reported the lowest rates of collaboration opportunities, particularly outside of their department at FSU (41%). However, more than 80% of faculty in Business/Law and Social Sciences report collaboration opportunities within their department, and more than 70% of faculty in these two discipline groups report collaboration opportunities outside of their department and outside of FSU.



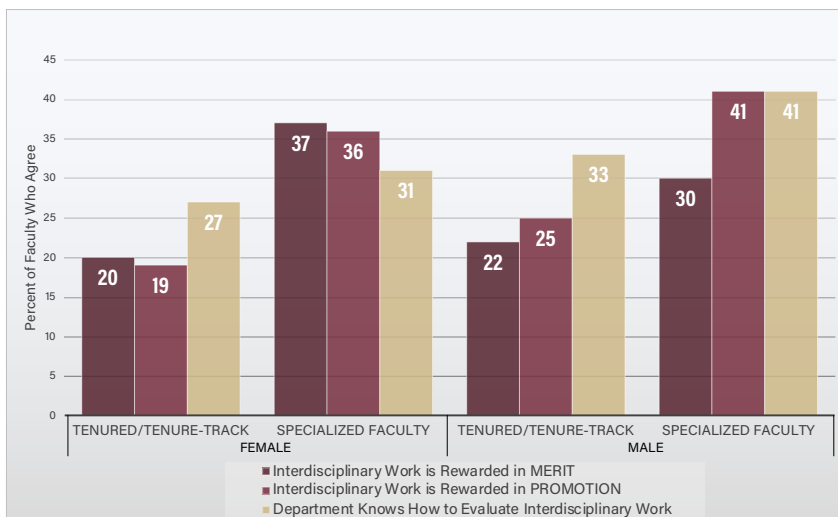
\*Note: Statistical significance indicates a statistically significant difference between tenure-track faculty in the national cohort and tenure-track faculty at FSU.



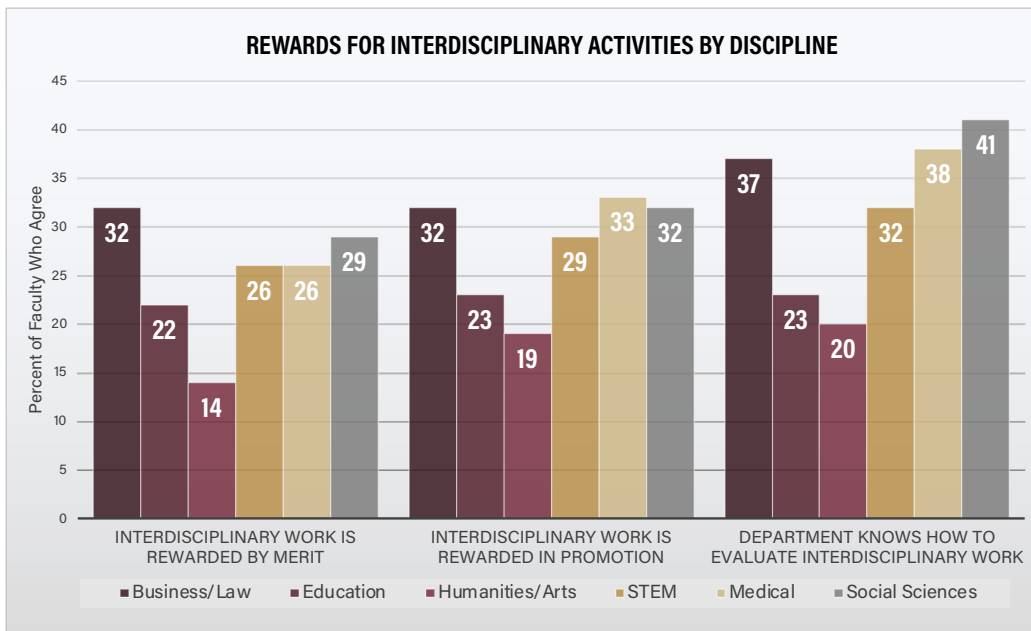
# INTERDISCIPLINARY WORK AND REWARD SYSTEMS AT FSU

As noted at the beginning of this report, rates of agreement that interdisciplinary activities are rewarded/effectively evaluated, is low at FSU and elsewhere, and these low rates are worthy of careful exploration and further efforts to understand how FSU can better support faculty in this area. Agreement regarding the reward systems for interdisciplinary work differs by faculty group, gender, and discipline.

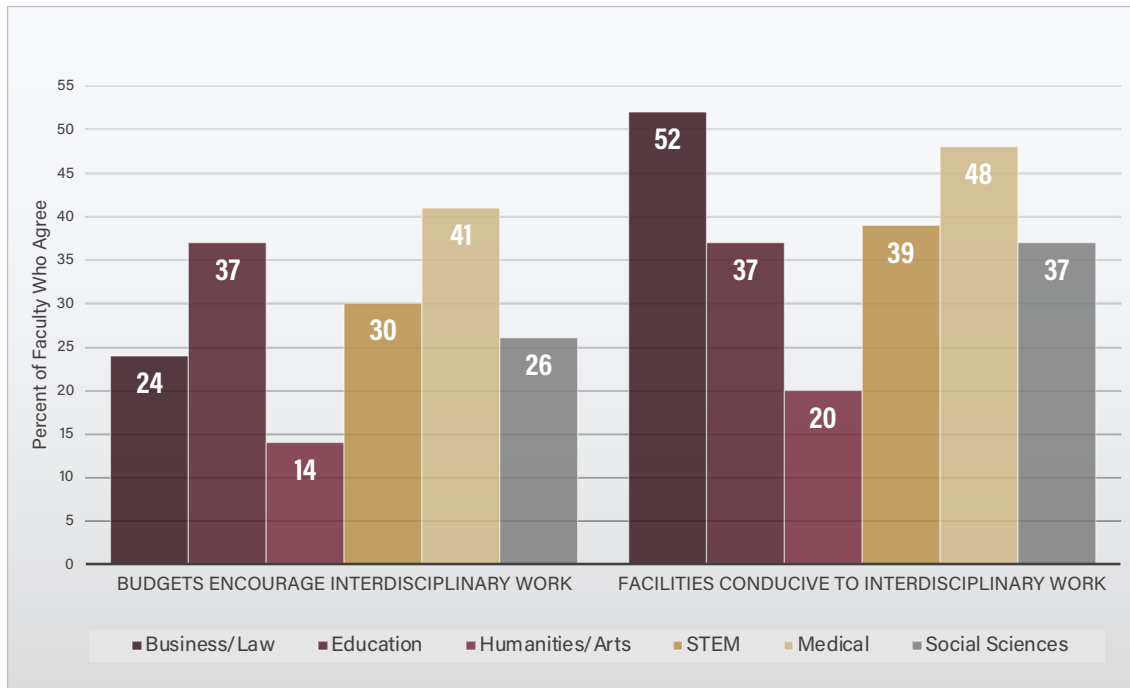
In general, SF report higher rates of agreement that interdisciplinary work is rewarded and effectively evaluated relative to TTF. In addition, females across the TTF and SF report lower rates of agreement that interdisciplinary activities are rewarded and effectively evaluated relative to their male counterparts.



The extent to which faculty agree that interdisciplinary activities are rewarded also varies by discipline. Faculty in business/law and the social sciences, and the medical sciences report higher than average levels regarding rewards in promotion and departmental evaluation for interdisciplinary work. The group with lower than average levels at FSU include those in education and the humanities/arts. Given that, as noted above, faculty in education and the humanities/arts report relatively high rates of interest and engagement in interdisciplinary activities, such findings suggest that these disciplines may benefit from interventions that may better support their ability to be rewarded for their interdisciplinary activities.



# THE ROLE OF BUDGETS AND FACILITIES IN SUPPORTING INTERDISCIPLINARY ENGAGEMENT



Like the reward process, most FSU faculty report lack of budgetary support for interdisciplinary activities.

Overall, less than one-third of those in business/law, humanities/arts, STEM, and the social sciences believe there is budgetary support for this kind of work. The two disciplines showing the highest rates of agreement that there is budgetary support for interdisciplinary activities include those in education (37%) and the medical sciences (41%).

Having the facilities to support interdisciplinary activities is also especially important for supporting and encouraging interdisciplinary activities. At FSU, this is an area that faculty identify as another important area of concern. Outside of business/law, less than half of faculty across the university indicate that facilities are conducive to interdisciplinary work. This is particularly true for those in the humanities/arts, where only one in five indicate that facilities support interdisciplinary work.

# NEXT STEPS FOR IMPROVING INTERDISCIPLINARY ACTIVITIES AT FSU

Based on the COACHE survey data, FSU faculty seem to view interdisciplinary activities as an area in which they have high levels of interest and engagement, but they report low levels of support and confidence in the reward structure for this kind of work. To better understand the context of these survey results, we will schedule meetings with faculty and leaders across campus to identify areas that can better support faculty in their pursuit and execution of interdisciplinary activities. We hope that these meetings will produce faculty-driven plans for supporting faculty who are interested in participating in interdisciplinary teaching and research.

*As we seek to facilitate a stronger support structure for interdisciplinary activities at FSU, we have identified several important areas for development:*

1

**Identify** how faculty and university leaders conceptualize interdisciplinary activities for those in different disciplines to better understand the needs of faculty across different units.

2

Work with the Office of Research to build on Collaborative Collision programs to explore modifications that can **increase inclusiveness** across disciplines and faculty groups.

3

**Learn** about how faculty engage in interdisciplinary teaching related activities to explore different models of interdisciplinary engagement across discipline.

4

Work with faculty to learn about the **financial supports** they may need to support interdisciplinary scholarship, including identifying possible ways to help them seek out contract and grant support for collaborative engagements.

5

**Explore** ways that academic leaders can better support faculty across discipline and faculty group in the merit, promotion, and evaluation of interdisciplinary activities.

ADDITIONAL RESOURCES CAN BE FOUND AT [FDA.FSU.EDU](https://fda.fsu.edu)