

Future State: Small Group Brief on Research Support and Partnerships

Scope, Charge, and Membership: A small group of 7 UAL employees convened from September 3 through October 12 to explore the future state of research support and partnerships at the University of Arizona Libraries. The group focused primarily on services, infrastructure, and (to a lesser degree) partnerships in support of research activities across disciplines; for more on partnerships we recommend reading this brief in conjunction with the brief forthcoming from the strategic partnerships working group. Members were selected to ensure robust representation across HSL, R&L, ODIS, and Special Collections. Group members included: Megan Senseney (Chair), Kiri Carini, Bob Diaz, Cindy Elliott, Jim Martin, Jean McClelland, and Niamh Wallace.

Background: Prior to our first meeting, the group reviewed a brief environmental scan on research trends in higher education, notes for All Staff sessions that were conducted to collect feedback on the environmental scan, and a collection of 2-page summaries of current work and priorities that department heads and key units supplied to cabinet. These documents served as the foundation for our discussions, analysis, and assessment of potential next steps.

In our week one session we identified HSL, ODIS, R&L, and Special Collections as the most frequently and fully engaged departments in research support. We also noted that UAPress makes organizationally unique contributions to research through their press operations and strong relationships with scholars. C&C and DDA support research activities through collections acquisition, maintenance, access, and discovery, though much of their work was not actively centered in our conversations, which focused on direct research support through engagement and partnerships with scholars. We also noted that our reference referral system, which is primarily supported by AIS, shapes next-phase research engagement in UAL. CATalyst Studios is poised to support research and foster partnerships in significant ways but has been in a holding pattern during the pandemic. ODIS partners significantly with CATalyst, and has plans to continue upon re-opening. R&L and HSL are also poised for future research support through CATalyst. UX and Assessment appear to focus more deeply on the student experience, but there is significant expertise in this unit that could bolster research support. Finally MarCom, the Business Office, and TeSS all have meaningful roles to play in the operational work associated with research support. We note, however, that there are critical staffing shortages that may hinder efforts associated with research communication, grants administration, and technical infrastructure.

With an understanding of our current work and priorities, we then shifted to review the brief environmental scan discussing trends in research in higher education. Our discussion highlighted the diversification of research objects, trends toward data-intensive and digital scholarship, and increasingly complex needs associated with data management, compliance, ethics, and privacy in research practices. We also discussed how the nature of research has trended toward more team-based, interdisciplinary collaborations in many domains. Among those who rely on technical infrastructure, there is a trend toward preferring modular solutions over monolithic cyberinfrastructure. We discussed the importance of the library as a hub for interdisciplinary engagement and encounter, the need to significantly improve our digital collections strategy to include access to content in human- and machine-readable formats, our desire to improve our visibility and communication around research across campus. Finally, we discussed the importance of maintaining library literacies in research areas that are quickly evolving through re-skilling, professional development, or deeper research collaborations.

Our goal over the course of the next four meetings was to explore potential strategies for aligning our organization to sustain core services and meet emerging trends in research under a highly constrained environment. As a group, we are not aiming to set forth a formal set of recommendations. Rather, we seek to surface a diverse range of potential actions. The group compiled a list of 23 such potential actions and then proceeded to map them along an agreement/certainty matrix to foster conversations regarding the potential complexity of each action. Three potential actions emerged as warranting more sustained discussion, and these were considered in more depth in week four.

In between meetings, each group member conducted a free writing exercise to respond individually to three of the four guiding questions that were posed to all future state working groups.

The chair synthesized these responses each week and incorporated them into the group discussion. A brief synthesis of these reflections is included in the next section.

Synthesis of Initial Response to Guiding Questions One and Two:

(1) What are the Libraries' current strategies for support, service and engagement in this area now? What are the priorities and the impacts? (2) What current or emerging needs in this area are not addressed in our existing service portfolio? Are there one-offs of effort by individual librarians/staff that meet needs but are not coordinated, sustainable service models?

In response to these questions, several members of the team discussed differentiation in disciplinary vs. functional **approaches to research support** in different UAL departments, and we also discussed challenges in cross-departmental communication and alignment, especially where divergent approaches may not be fully complementary. While there was considerable agreement that the status quo couldn't be sustained, a wide range of potential directions emerged in the free writing exercises. Currently, support may take the form of 1:1 consultations through meetings and email, drop-in hours, workshops, the creation of digital resources, referrals to other resources, and occasionally more intensive, sustained participation on one or more projects. There was some concern expressed that much of our support work is reactive rather than proactive and we may be able to improve sustainability under constraints if we model anticipatory programming and rein in reactive services. This led to a set of initial thoughts around how a menu-based approach or tiered service model might be implemented at UAL. We also considered various other approaches to systematizing our support offerings by shifting our areas of focus. Another suggestion focused on modeling our research support strategy on phases of the research lifecycle. Related to the question of reference triage and referral, another suggestion proposed retooling and streamlining our current Ask Us model.

Another consideration addressed by group members was how we choose to prioritize active **research and scholarship** among librarians. Do the libraries want to prioritize a characterization of librarians as support staff, full partners in research, or some mix of both? Partnership can be construed as how we partner on research projects with faculty or how we partner with other service units on campus to provide support. Both warrant clearer prioritization as we make decisions about our future state. This will inform the relative amount of time we ask employees to invest in **professional development and re-skilling** to take on new roles as well as collaborative scholarship with faculty on campus. Both forms of investment will have an impact on the amount of time spent on regular operations, which is difficult to negotiate under current constraints. In partnering with other service units on campus to provide support, the group proved strongly in favor of cultivating **cross-campus relationships** as critical to ongoing success, especially with Research, Innovation and Impact (RII).

Two key research areas emerged in free writing exercises that will likely need increased resources in order to be successful in coming years: support for **data services** and support for **evidence synthesis and systematic reviews**. One member discussed the importance of prioritizing the long tail of scientific research, social sciences, and the humanities in developing programmatic data services because these areas are most likely to require institutional support and be underserved elsewhere in their scholarly communities; the same participant suggested building critical areas of domain expertise into a programmatic focus on research data management. This potentially aligns with another member's assertion that we need to develop a more coordinated approach to addressing the shift toward data-intensive, digital, and interdisciplinary research. Other areas likely to require increased attention are associated with research support for topics such as privacy, ethics, and regulation. Library employees are poised to provide important contributions to campus-wide conversations around data governance, responsible conduct of internet research, seamless access to campus technologies, and technologies of surveillance. These are issues where the library needs to be at the table even in contexts where another unit, such as RII or UITS, may take the lead. The libraries may prove to be a strong advocate or key partner in addressing emerging research needs associated with these topics.

Distinctive collections, and especially the importance of digital stewardship for distinctive collections, emerged as a cross-cutting priority among group members. We recognize the impact of having gone years without a fully programmatic approach to **digital collections** (including digitized and born-digital resources). The impact of COVID on research and teaching has further amplified our need for significant investment in a digital collections strategy that encompasses technical infrastructure for

discovery, access, and preservation and includes a concerted focus on how collections might be used for close reading or computational analysis. Understanding our collections as data will be a key driver in supporting digital scholarship and data-intensive research, and it helps bridge our approach to traditional and emerging library services. Here we treat “distinctive collections” as those that are accessioned into Special Collections or are unique to our institutional or research data repositories. We are particularly interested in highlighting and making discoverable distinctive collections from underrepresented communities with an eye toward diversifying representation in our digital collections.

In free writing exercises, members also discussed the role of grants and **funded research** in library strategy and operations; the role of **TeSS, MarCom, and the Business Office** in research support; and how we perceive **space** within the libraries as a key component of providing research support. While some group members advocated that improved grants literacy can assist with research support, build the reputation of UAL among our peers, and also diversify our financial portfolio during a period of contraction, others expressed concern that externally-funded research distracts us from our core mission and services, often with the unintended consequences of financial overhead for our efforts. Research visibility and communication emerged as an early and pervasive theme in our work, and it includes how we communicate our own research and research services to the wider community as well as how we provide support to scholars seeking to understand how to communicate their own research more effectively. We discussed the conundrum of UAL **increasing our visibility** while simultaneously working to **manage expectations** regarding our own services and institutional capacity.

There were outstanding questions or areas of disagreement about the degree to which these topics are current and/or future priorities. One member raised a question regarding which open lines would likely be eliminated or filled, and we defer to department heads and DWG for further recommendations. Understanding the realities of our current fiscal climate, we also acknowledged that UAL employs fewer library staff and faculty than other peer institutions and research libraries, which further complicates our approach to staffing models and portfolios.

Synthesis of Prioritization Activities: Based on discussions and free writes from weeks one and two, the group compiled an initial list of over 50 potential actions, which were synthesized and merged into a final list of 23 potential actions (See Appendix A). These served as the basis for week three’s prioritization activity, which took the form of an agreement certainty matrix. For each of the 23 items, the group conducted rapid assessment to determine our level of agreement with the proposal based on a yes-no voting metric in which “yes” votes were assigned one point. This step helped to sort cards along the y-axis of the matrix. The next step required group deliberation regarding how certain we felt that the action was implementable *and* would have positive impacts for the organization. Moving from top to bottom, we assessed our confidence regarding the 13 items for which we had highest agreement. This left another 10 items with low agreement un-mapped along the x-axis (See Appendix B). This exercise helped the group assess the relative complexity of pursuing various potential actions and surface perspectives on feasibility and desirability across the entire group in rapid fashion. Four potential actions emerged as having high agreement and high certainty: (1) establish a seat at RII with UAL reps on innovation council and elsewhere; (2) establish clear structure for cross-departmental engagement around research at UAL; (3) increase focus on networking, communication, and outreach to increase visibility -- likely through work with MarComm and UX; and (4) strengthen focus on distinctive digital collections with strong focus on digitization/preservation/collections as data.

Next, each member participated in a prioritization free write in response to guiding question three: *(3) Looking at both our current strategies and priorities and considering the emerging areas of need, how would you prioritize these recognizing that we are in an extremely constrained environment (assume no new funding/positions/a contraction of funding/positions)? What areas of work would be lowest priority or could be let go of? A synthesis of these responses follows below:*

Explore. One or more members of the group expressed interest in further exploration for the following actions in a free writing assignment that followed our group exercise to map potential items along an agreement/certainty matrix:

- The group expressed interest in organizing around a **hybrid matrix model** that more efficiently brings together subject and functional work.

- Many members of the group were in favor of exploring strategies to establish a **bounded research support** portfolio, though there were many potential scenarios for what that might look like once operationalized.
- Likely in conjunction with the above points, the group discussed the importance of **adjusting work allocations** to accommodate shifting operational support and account for emerging areas of need associated with professional development and research support.
- Several people expressed interest in strategies for **streamlining reference support**, which may indicate a cross-cutting effort among AIS, R&L, and other departments.
- Prioritizing **distinctive digital collections** was noted as critical work with the caveat that we are not appropriately staffed and organized to establish a strong program at present.
- Regardless of whether we pursue a hybrid matrix model for research support, the small group agreed that we need to prioritize **cross-departmental communication strategies** as a key component of future state planning. Better communication flows can decrease redundancies and duplication while also reducing overhead associated with competing priorities, confusion, or mixed messages.
- We would do well to prioritize a strategy that increases our **visibility to campus**. This may include collaborating with MarCom to develop an external communication strategy around the libraries' research support and/or making a concerted effort to establish a research communication strategy that cuts across multiple service units.
- We must focus on ensuring the success of **existing grants** and other current collaborative projects through appropriate resourcing and staffing.

Caution. A level of disagreement or concern emerged around these items, suggesting that if they rise to the level of a priority, we must plan to accommodate the level of complexity required to implement the actions for sustained, positive impact. All three items below require further cost-benefit analysis to evaluate the relative impact of different approaches.

- Several members observed how difficult this process was without having been combined with an **assessment** of current campus research needs. While many group members countered that conducting a well-designed assessment was out of scope for our group and likely impractical given our decision-making timeline, the value of assessing research needs still holds moving into the future state.
- Some group members expressed concern regarding the need to be selective when seeking grant funding, citing labor for proposal development, overhead costs of implementation, and distraction from core mission as disincentives. Others saw value in **grant seeking** as a means to elevate reputation on campus and among peers as well as a strategy to diversify funding for high-value activities that might otherwise be cut.
- While the need to support in-service **professional development and re-skilling** to address service gaps in light of limited hiring was a point of near universal agreement among group members, individuals were less confident about a clear strategy for redirecting resources and making strategic investments based on need. This commitment is an upfront investment of time and resources for uncertain gains, and it is not without risk.

De-prioritize. The following four items were selected from among the potential actions as criteria for deprioritization.

- The entire group recognized that maintaining the status quo for our organizational structure wouldn't allow us to effectively absorb the proposed budget cuts, indicating a willingness to significantly re-think our approach to research support and portfolios of work at both the organizational and individual levels.
- One group member suggested moving away from in-house customization, arguing that anything UAL has to customize 'in house' should be looked at closely for potential alternatives. This may surface tensions between the libraries stated value of defaulting to open and the likely prioritization of vended, off-the-shelf solutions for research infrastructure.
- For research support and partnerships more specifically, the group indicated the importance of deprioritizing any research infrastructure or support services that are largely duplicated in (or could be absorbed by) other campus units. This mode of deprioritization further emphasizes the importance of forging deeper relationships with other service units to ensure alignment and

continuity. For examples of potential duplication, see the assessment of partner vs. library coverage related to graduate student competencies in Kline et al.'s *Graduate Student Support Plan* for UAL. For examples of absorbing research infrastructure, see ongoing work to build out enterprise-level support for GIS with Cyverse and UITS.

As part of the group's week three assignment, members were also asked to nominate specific actions for further discussion and scenario analysis in week four. We utilized group deliberation to discuss different approaches to implementation for recommended actions.

Synthesis of Scenario Analysis

(4) Are there different ways that these services or programs could be delivered or supported AND/OR different ways in which the Libraries could organize that would help to address the issues of a constrained environment? Are there services/work we are doing currently that we could stop or change in order to free up or shift resources?

Altogether, the group nominated a total of seven different actions for further discussion, and we agreed to focus conversation on the three that received more than one nomination:

- **Hybrid matrix model.** In recent years, library administrators have turned significant attention to the question of subject vs. functional organizational structures for libraries (Cox, 2018; Hoodless & Pinfield, 2016). Pursuing a hybrid matrix model allows UAL to maintain a level of functional and subject differentiation while reorganizing into programmatic groups. While there is significant variation in how this might be modeled, our discussion primarily focused on small teams organized by domain (e.g., arts and humanities, social sciences, life sciences, and physical sciences) that would interact with functional groups focused on different aspects of research and instruction. In assessing this strategy, the group saw potential benefits realized through increased (and improved) information sharing and better positioning for building capacity and depth of knowledge through cross-training. The potential drawbacks of this model were cited as challenges in ensuring accountability under dotted-line reporting and potential for lack of clarity on prioritization and goal-setting. We recommended further exploration of how this model has worked in practice at other research libraries.
- **Bounded service model.** Setting parameters around the nature of services prioritized emerged as a high priority with multiple potential directions. The group discussed a menu-based service model that specifies the types of services offered and creates conditions for declining support requests that are "off-menu". We also discussed potential tiered service models in line with Vinopal & McCormick, 2013 that articulate enterprise-level services, first-of-a-kind projects, and high-touch collaborations along with the conditions that inform decision-making for upper-tier support. We also discussed strategies for reducing labor associated with current services, such as capping the number of 1:1 consultations per week and offering support on a first-come, first served basis. This led to further discussions associated with how to account for asynchronous reference within a bounded model. Benefits of a more structured service model include improving communication around our offerings to campus, but we note the potential drawback that community support may be diminished.
- **Re-skilling.** One of our core principles was operating under the assumption of limited hiring and/or reduced staffing. In the absence of recruiting new talent, reskilling becomes an even more essential component of programmatic research support. This applies to filling known gaps (e.g., digital preservation, digital scholarship, and evidence synthesis) in our current body of organizational expertise and ensuring that our resident experts have ample opportunity to stay current with evolving research practices. The obvious benefit of a more programmatic approach to in-service professional development is that it represents significant investment in our faculty and staff, but there are significant drawbacks associated with allocating time to this work when operations are already strained for staffing. The group discussed two potential strategies, one in which we pursue 80% allocations for core operations and 20% allocations for strategic initiatives that might include a concerted program of professional development or collaboration on strategic research projects. More controversially, we also considered reduction to a 9-month contract with options to apply for funding associated with strategic professional development or to secure summer salary on funded projects.

Appendix A: Potential Actions

The following is an **unprioritized** list of potential actions that the group considered as part of our agreement-certainty matrix exercise. These items were culled from free writing exercise and discussions during weeks one through three.

- 1) Maintain status quo for org structures associated with research support (and look elsewhere for reductions and eliminations)
- 2) Shift current employee portfolios to increase focus on functional OR lifecycle-based research support (e.g., data services/evidence synthesis/digital scholarship/collections as data; collection and synthesis/analysis and reproducibility/communication and publishing)
- 3) Create a hybrid matrix model for domain and functional research support (e.g. create groups based of humanities/arts, social sciences, physical sciences, and life sciences; and create group based on functions of data services, evidence synthesis, digital scholarship, and collections as data that triage and collaborate as needed)
- 4) Shift resources toward R&L to integrate all functional work into liaison model.
- 5) Adjust portfolios for librarians and select staff to support deeper engagement on grants and collaborative projects ((NB: This involves a deeper cut to operational support and would likely require a shift in deep liaison work in favor of a more defined menu of services)
- 6) Restructure reference processes, with a focus on triage and referral. (Consider shifting more responsibility to faculty OR Consider expanding AIS training on research topics)
- 7) Build staff and faculty expertise around external funding, program management, and project management.
- 8) Increase focus on networking, communication, and outreach to increase visibility. Likely through work with MarComm and UX.
- 9) Establish a clear structure for cross-departmental engagement around research at UAL.
- 10) Establish strategies for shifting research infrastructures out of the library where they ought to be enterprise-wide.
- 11) Strengthen focus on distinctive digital collections with strong focus on digitization/preservation/collections as data.
- 12) Prioritize space and access to collections as fundamental research support (decrease focus on e.g., outreach/consultations/collaboration)
- 13) Prioritize services and support based on level of funding (choose either to pay more attention to "long tail" work or choose to ramp up attention where the money is)
- 14) Prioritize services and support based on key campus-wide initiatives (e.g., the strategic plan)
- 15) Create a more bounded research support model through tiered services, menu-based services, fewer 1:1 consultations or one-off engagements.
- 16) Establish program to address re-skilling needs and in-service training for emerging areas of librarianship (e.g., shift money toward strategic professional development and avoid hiring)
- 17) Assess research support across campus and choose a gap-filling strategy or other needs-based strategy (such as aligning with accreditation requirements or prioritizing based on aggregate faculty-expressed need)
- 18) Establish a seat at RII with UAL reps on innovation council and elsewhere.
- 19) Eliminate/combine smaller administrative units to reduce overhead and support frontlines services.
- 20) Focus on UX and digital research support assets that can be repurposed and reused.
- 21) Prioritize research support to graduate students (reduce focus on faculty needs)
- 22) Create a goal-based org structure that is not necessarily tied to disciplinary/functional distinctions.
- 23) Create a research cluster model that utilizes a "train the trainer" approach and/or an "ambassador" approach and prioritize facilitating those communities.

Appendix B: Agreement-Certainty Matrix

The following is an image capture of the agreement-certainty matrix the group explored to assess the 23 potential actions listed in Appendix A. An interactive version of the matrix is available at: https://miro.com/app/board/o9J_klUoZz8/.

