

Wisconsin Center for Education Research

SCHOOL OF EDUCATION
UNIVERSITY OF WISCONSIN-MADISON

Technical Services Focus Groups

REPORT OF FINDINGS December 10, 2021

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INTRODUCTION AND BACKGROUND

In September 2021, leadership from WCER and WCER's Technical Services contracted with Dr. Robin Worth, Scientist/Evaluator at the Wisconsin Evaluation Collaborative (WEC) to conduct a series of focus groups with WCER Principal Investigators (PIs) and Project Managers to learn about "their impressions of Technical Services and any future capabilities that they [felt] were worth acquiring," (email from Bob Glover, September 15, 2021). Following a brief discussion of data collection and analysis methods used, findings are discussed, accompanied by illustrative quotes from participants. A summary of key findings and recommendations are presented at the end of this report.

IMPORTANT CONTEXTS FOR CONSIDERATION

Two very important contexts have surrounded the work of Tech Services in the past year and a half: a) the dramatic shift in workplace (and therefore technology) needs happening because of the Covid pandemic and b) ongoing challenges of ensuring equitable access to the technology needed to do one's job to the best ability (e.g., high speed internet access, the need for using personal cell phones for research studies, helping projects to anticipate making a webinar equally accessible, etc.). Although these issues did not explicitly arise during the focus group discussions, they are important for interpreting the findings, framing the work of Tech Services, and could influence future considerations.

DATA COLLECTION AND ANALYSIS

In late September 2021, Technical Services Director Bob Glover sent invitation emails to 47 Pls and project managers, and a large number responded that they were willing to participate. A doodle poll was conducted to facilitate scheduling, and ultimately five one-hour focus groups were conducted in October 2021 with a total of 24 participants from across WCER. The protocol developed for and used in the focus groups can be found in Appendix A.

Focus groups were conducted virtually, using Zoom, and were recorded so that a transcript could be produced by the Zoom service. After reviewing and cleaning the Zoom-produced transcripts, the evaluator deleted the recordings to help protect the confidentiality of the participants. The evaluator coded the transcript data by the major themes that arose. Representative or notable quotes that helped to illustrate themes were also flagged for inclusion in the final report.

SECTION 1: DATA COLLECTION AND ANALYSIS

The following key findings are presented in the order of questions in the focus group protocol.

WORD/PHRASE ELICITATION

To activate their thinking, focus group participants were initially asked to name the word(s) or phrases that first come to mind when they think of WCER Tech Services. This exercise was also intended to gather people's general impressions of Tech Services in a very brief way. Responses included:

- Helpful (3)
- Uncertain (2)
- (Very) overwhelmed (2)
- Understaffed (2) and under-supported
- Indispensable
- Robust
- Quick
- Responsive
- Shrunken
- Old-fashioned
- Slow
- Cumbersome
- Heavily unimaginative
- Reactive rather than proactive
- Computer support
- Third floor
- Resources
- Technical expertise
- Technical support

A theme that emerged was that Tech Services had a sort of "split personality" (IT Support and Development) or had "multiple sides" in terms of people's impressions of it:

"...there's the 'hey can you help me order a computer?', there's the 'help me network this,' there's 'they helped me develop something like software development,' but then the side that was doing sort of like graphic design and stuff like that I see as even separate still for me."

The multiple facets of Tech Services were notable for some participants because they had different impressions of the various offerings. One participant referred to Tech Services as "a little uneven." Another reported that, "IT support is personalized and responsive; the development side has been thorough and slow." Subsequent questions (reported below) elicited more details on this idea.

Some additional quotes from participants in response to this question included:

INTERACTIONS WITH TECH SERVICES

Participants were asked to describe their interactions with Tech Services, including frequency, means for interacting (phone, email, in-person, etc.) and how they felt about their interactions. Frequency of interactions ranged from several times a year to several times weekly. Participants reported using a variety of means for contacting Tech Services, with multiple participants noting that the "ticket system" functioned quite well and has been "really efficient." Another participant reported meeting regularly via web-based meetings.

Those who formerly "stopped in on the third floor" tended to report that "the door is now always locked" or "no one is there anymore." Several participants noted that this was problematic because in case of an emergency such as non-functioning equipment during a presentation or other event, it is vital to be able to come to the office to ask for help. With current levels of staffing, it appears that Tech Services has needed to keep their office door locked, which poses problems. As one participant described,

"...an issue lately is they've been locking the door, and not even coming to the door when you knock. They're just too overwhelmed probably dealing with people on the phone and they kind of need the person at the front desk."

[&]quot;Maybe the efficiencies aren't always in place, but definitely robust."

[&]quot;They could be more transparent about the kinds of options."

[&]quot;Providing terrific support over a period of many years for many and diverse problems."

Another participant noted, "I used to do drop-ins as well and due to the staffing issues, that's kind of no longer a thing."

Many participants noted the change in support from Tech Services since staffing had been cut back. For example, one participant noted,

"Typically, my interactions are amazing. I've had only positive things to say about Tech Services until lately."

Another reported,

"I've always had really positive interactions. I would say it's kind of like a mystery to me now like really what is going on and who are the people who are there still? And what if I need this, who is the person to talk to, and what is still going to be here and what's going to be outsourced? So it's a bit of a mystery, I guess, right now, so it's just sort of, as things come up I just kind of try to figure it out."

Still another reported,

"I think the number of people who have left on the support side has adversely impacted the support they're able to provide the Center. (...) It's really impacting their ability to deliver quality support."

The status of the person requesting help was perceived by several participants to be salient when asking for and receiving timely support. As one project manager described,

"It's kind of a common theme at WCER, if I can't get the project or an issue handled, I will cc my main professor, who is 10 years older than me. And suddenly the problem gets fixed much quicker as soon as I cc him. It's kind of disrespectful if I can't get something done with my own credentials as the project manager and I have to draw someone else in."

Feelings about interactions with Tech Services varied, often dependent on the user's needs. Tech Services' support for individual's computer problems, log-ins, passwords, and other common IT issues were roundly reported to be timely, efficient, helpful, and positive. Adjectives frequently employed were "helpful," "nice," "pleasant," and "responsive." People reported being extremely satisfied with video services, and many people bemoaned the loss of this service. For example, one PI reported,

"I am crushed that they moved out Dave Marcou because I frequently worked with him in terms of videorecording in classrooms so that I got really high quality, production quality video."

Perceptions about support for project websites were more complex. Several people reported that updates were made quickly and efficiently. Another participant reported, "We've tried to get some web help in the past and it was a little bit mixed." In addition, several people reported that the extent to which website design and maintenance were included in overhead or were subject to additional charges was unclear. As one participant reported,

"There's some uncertainty around when, for example, website development or some other things, there's some uncertainty and some maybe inconsistency around what of those requests is covered by indirect that we bring in on our projects and what we're charged extra for."

A number of other participants also mentioned the lack of clarity over what indirect covers in terms of Tech Services supports more generally.

"It's been kind of opaque in terms of what we get from indirect through Tech Services, and I think a few years ago they had a brown bag session where they shared information about that, so I think they recognize that was an issue that the projects and PIs were wondering about."

To this statement, another participant added, "We have our own resources, but we had to get our own resources because with the indirect we weren't getting the resources that we needed." Perceptions of support for graphic design have been mixed as well. Many participants reported having had excellent experiences with logos and other design needs, while some reported having to go outside of WCER for satisfactory design services.

Support for software, application, and other development needs were often reported to have been less than satisfactory. Those with complex needs for research projects such as developing advanced learning technologies, software and app development, data analytics, and data security reported a variety of frustrations. In these areas, support was described by several participants as "cautious," "outdated," "unwilling to take risks or find outside help or support."

Pertaining to interactions across Tech Services offerings overall, there was a widespread opinion that the unit was "more reactive rather than proactive in their support." Participants noted that Tech Services "only responded to what I asked for rather than suggesting logical tools that might be needed."

As another participant noted,

"for the person (in our project) who interacts regularly (with Tech Services), I'd characterize those interactions as him having to probe and follow up more. Again it goes back to that proactive versus reactive. We're always sort of trying to pull and move things along rather than the other way around."

Another participant who has been at WCER for a long time reported,

"I feel like I often have a vision of what I want to happen and they say, 'Well, we can't do that' and it's not necessarily because of budget. They say, like, 'my system doesn't do that, we don't know how to do that,' and so, rather than even taking any time to do some research on 'Can we do that? Can I think outside the box?' they say 'No.' I go back, do my own research, find out it is possible and then basically figure out a way for them to do it. And that happens all the time."

Another participant responded to this comment, saying,

"When I have asked for something that feels like it's a little out of the box, I often get 'The answer is no.' I'm not as tech savvy as people who work there, but I'm pretty sure that I'm not asking them to reinvent the wheel or come up with something new. So if I could give some constructive feedback, I would say, 'OK, fine, we can't do what I'm asking, can you come up with an alternative, instead of just stopping at 'no.'"

Similarly, participants in this and other focus groups also reported,

"I feel like you have to push or do your own research to get whatever that alternative is, and I'm not asking for anything edgy either."

"There are times when I feel like my requests or what I want to accomplish are an inconvenience."

When asked whether this was a function of the layoffs and/or COVID, nearly all respondents agreed that these issues pre-dated either factor. Conversely, however, one respondent described Tech Services' make-up as "pretty vanilla cookie cutter" in order to be able to serve many different projects' needs, which necessarily creates challenges in capacity when requests from outside the "menu of offerings" occur.

Further details and suggestions for addressing these issues are reported in subsequent sections.

SERVICES CURRENTLY USED

The evaluator then asked participants to indicate the Technical Services they currently or recently used. This question was posed to measure the awareness of the various services but was done so without prompts in order to determine which service categories most frequently came to mind among participants.

Services named, by frequency of mentions, were:

- IT, computer support, set-up (11)
- Video recording/editing (9)
- Project website development (5)
- Network/VPN/remote access (4)
- Graphic design (3)
- Purchasing (2)
- Additional, special-purpose websites (2)
- Web app development (2)
- Software licensing (2)
- Software development (2)
- Grant proposal planning (1)
- Virtual meeting set-up and support (1)
- Learning management system (1)
- Proprietary software support (1)
- Data analysis programs (1)
- App server (1)
- Security and storage/IRB planning and issues (1)
- Equipment loans (1)
- Knowledge Base referral (1)
- Transcription (1)
- WiscList support (1)
- Poster printing (1)

In the cases of services that are no longer provided by WCER Tech Services (e.g., transcription, poster printing, video services), participants often provided feedback regarding the loss of these resources. The most commonly mentioned service was videorecording and video editing.

"We no longer use their transcription and we no longer use their videography, but before those were in high demand here."

"With [these changes] we're going to have to incur another expense by having to, and we're lucky we can get Dave Marcou, we're going to have to pay for him, but he knows the project and it's only a couple of times a year, but small things like we just had a webinar and now [we] will have to learn, or will have to ask someone in Tech Services, how do you cut video so our webinar doesn't look foolish?"

"And I think we're nervous about how the cuts in Tech Services are going to impact the professionalism, by which our products have been delivered to our districts and we've always been very proud of those."

Some participants also expressed hesitation in approaching Tech Services for help following the staffing cuts. As one participant described,

"We're all in this state, I can almost guarantee you everyone is sort of, 'Should we ask Tech Services? Are they overwhelmed?' You know I'm sure they want to throw things at the door when someone knocks, so I think one thing that I hope is communicated throughout all of these focus groups is communication is key."

Participants expressed considerable confusion over the recent changes in staffing and services at Tech Services. Some were aware of changes, some were not, and some had inaccurate understandings. Participants repeatedly communicated that Tech Services leadership needs to communicate to the Center what the plan is moving forward following the staff cuts and reduced services. As one participant noted,

"It would be really helpful to have regular communications with folks in the Center to feature who does what, for whom, what the expectations are for their new levels of functioning, given the reduced staffing. And what kind of timelines we might expect for projects to get support and to put together proposals, etc. I think that's really critical. And knowing who does what and who to approach or what the lines of communication would be, so if you need support from David Marcou, do you need to go through someone or do you go directly to David? For example, in the old days, I would just walk in and talk to David or to Brian or to whomever but maybe there's a different protocol that needs to be in place now."

Participants also noted services that they once used and no longer do, or investigated using, but then looked elsewhere. One PI, in regard to software development, reported, "I really liked them, they were good and they were thorough. When I stopped using them anymore it just, it was beyond my price point."

Similarly, other participants noted frustrations in the past with being unable to rely on Tech Services to complete projects in a timely manner. One participant described staffing their project to be able to handle technology-related work internally, because they "couldn't get support when [they] needed something done." The participant further explained,

"We need it done when we need it done because we have [deadlines] that have to have it delivered at a certain date, we don't have flexibility and I don't think we were getting things in the queue in a way that we were able to say, 'Well, on November 1 we need to have this website up and we need to have this thing running.' The resources, they just didn't have, and so we had to either build it or get it externally."

Another participant noted that their project "replicated some of the services that WCER provides" because they "were able to be more nimble."

A number of participants noted that they have stopped asking Tech Services for advice on problem-solving or new technologies, citing what they perceive as a lack of willingness to "think outside the box." One participant reported,

"Over time, when you get a 'we don't, that's not a thing we do, we don't do that, that's not, I think we don't, that's not our, we don't do that, that's not ours. Well, that's, no, that's not ours,' you get that a couple times and then you just start looking elsewhere. So I actually don't, I can't remember a time in the last five or seven years where I thought, 'oh I should talk to Tech Services about what's possible. (...) [With questions like] 'I've got this thing and I don't know what to do with it, and can you give me some ideas?' I don't go there, I go to other colleagues. It wouldn't even occur to me now to go to Tech Services for that sort of conversation."

AWARENESS OF SERVICES

Using the WCER Technical Services Service Categories document (Appendix B) as an organizer to prompt recall, the evaluator asked participants to indicate their level of awareness with each of the service categories. Clarification of the categories was provided when needed, using the descriptions found in the document. Participants were also invited to share any additional perceptions about the Service Categories.

Generally speaking, participants were aware to some extent of all the service categories. The few exceptions included four people who were not aware of "Research Technologies and Support," specifically pre- and post-award planning services. Some participants qualified that they were "aware" of certain services (such as security or conference support) but were not "knowledgeable" about the details of the offerings.

Participants expressed praise for certain services:

- IT Support was repeatedly described as "Super-helpful" and "responsive."
- Database systems and storage were praised by several
- Two people reported that security was a "strong point."

Some participants, however, reported that their experiences with certain services led them to believe that that these services were offered in name only, or that they were otherwise disappointing. Web and app development were often cited as being problematic. As one participant reported, "it's offered, but not helpfully." Conference room support was also listed as an issue, with several people saying it was "nonexistent." One participant reported that they "would have to rely less on [Tech Services'] immediate response to issues that come up if the (conference) rooms were a little bit more ready to go." Another person suggested that "it would be helpful if the conference rooms were updated; I think some of that has been going on for years." Several people reported that some services that existed lacked "creativity" or "innovation," including media and design services, the software library, ("it's another thing where you want them to be creative and they're like, 'No.'"), pre-award planning ("they do consulting?") and security ("they have 'sort of' security," "security can be improved").

CURRENT AND FUTURE NEEDS

Participants were then asked to think about their current and future research and projects, and what needs they will have, or would like to have, from Tech Services.

Assistance in communication was a predominant theme, given that, as one participant pointed out, "one piece of our mission is to communicate our research to the general public." Another noted that "funders are expecting us to disseminate in more innovative ways." This participant further pointed out that, "technology is the bedrock of communications," and another stressed the importance of "telling the story of the work we do." Participants identified the need for help with various communications media, including:

- Infographics
- Podcasts
- Video
- Social Media
- Illustration
- Poster printing

Participants noted that when they have approached Tech Services for these types of services, they are told "We don't do that," or "Try the Communications Office" or "MERIT might do that." Many participants believed that Tech Services should be a resource for "problem-solving" in this area and when they don't provide a particular service, that they should be aware of where on campus these needs can be met. As one participant described,

"We've had the experience of Tech Services saying 'No, we don't do that,' but then you sort of want the next step which is a forward chart of who you go to next and then next, etc. because there may be other units on campus that you should be working with and so having a clear path or understanding, who you go to would be really, really helpful from Tech Services."

Participants also expressed the need for clear communication from Tech Services themselves—what services they offer, what is covered by indirect and what is not, who should be approached for various needs, and what expected response and turn-around times would be.

Additionally, participants, particularly those from smaller projects who have wanted software for infographics, project management, or other needs but could not afford them, wished for Tech Services to help facilitate awareness or partnerships within WCER with similar needs that might enable "group buys," sharing, or other means to access specific tools.

Services that have been discontinued or moved outside of WCER were of concern to many participants, particularly video, poster printing, and transcription services. Some participants expressed concern that grant proposals that they submitted before the service cutbacks and included videography or other services no longer covered by overhead, will cause significant budget issues if their grants are awarded.

Website design and support was another topic of much discussion. Participants had a wide variety of understandings about website updating, with some projects doing it themselves and others not knowing that was possible. Some expressed concerns about being charged for updates, and others were not aware that there were costs involved. One PI reported that "it seems like there's initial support for web development but it kind of goes away after a while." Another noted that there were barriers to disseminating research results on project websites because.

"Tech Services holds the key to our website and getting things out there isn't as easy for us and then they'll they want to charge us for the work done, so if they could create easy pathways for PIs and staff members to get access to our website to do things technologically, I think that would also be really helpful."

Others in this group expressed surprise with this, with one asking, "Do you mean you don't have access to your website? Like you're unable to edit your own website?" This resulted in a discussion about different approaches to maintaining websites, with one participant noting that, "My team doesn't have \$60 per hour to pay for uploading or things like that so I found [gaining access to our site and making our own updates] to be incredibly helpful, something that I definitely hope that Tech Services will continue."

To reiterate, the lack of clarity about website design and update parameters was mentioned often. As one PI noted,

"It's really not clear exactly how much you get for your overhead and how much time is remaining, so it's like three days per grant or something like that? So you're two years into the grant and you want a major website re-hauled. Do you have the money for that already or do you have any balance and it's hard to know that, unless you ask and I don't know whether there is some easy way to figure that out at the end of the year. And it's also in terms of help setting up computers and ordering things. Is there a maximum or how often can you do this? I think, just having some clarity will really help."

Some talked about website and other design needs that they contracted for outside of WCER because, as one participant described, "our perception was that [Tech Services] was going to take longer and cost more than having someone do that outside the university." Similarly, some participants reported going outside for services like event registration capabilities because Tech Services' offerings were inadequate. Database and project management software were also noted as items that were obtained outside because the "homegrown" versions at Tech Services were "clunky at best." Several participants noted that the Center would benefit from integrated, off-the-shelf systems for accounting, grant and project tracking, personnel and other operations as opposed to the "home-built, one-off applications" currently being used.

Research technologies and support was also an area of considerable discussion. Many PIs expressed the belief that Tech Services needed to increase their capacity to be aware of, recommend, procure, and support technology solutions for research problems and needs. As one participant described, "it would be great to have a research-level person who worked in Tech Services who knew about research, but then also knew about the technologies that could help." Other participants noted that "methodological expertise" was needed in Tech Services along with someone who "stayed current" with "what's happening in educational technology and served as a consultant for PIs." Another participant reported,

"I'm not a technology director. I need technology, but I feel like there's no middle ground. Unless I know specifically what I'm asking for, there's nobody on the Tech Services team that can help me figure out what I need to do or get."

More specifically, web and app development were repeatedly mentioned as important needs for research. One participant noted,

"There are a lot of dynamic new things that are going on in education, as it relates to application development and software enhancements and integrations. It would be great if we had that resource, because both for research and for operational implementation of things, that would really be an asset."

Others noted that they have hired their own full-time developer because that person could "be involved in the everyday research meetings and have a better sense of what we need and understand the goals of the project."

Participants again suggested that being more aware of resources and expertise across campus could help address the need for software and app development. One PI stated,

"if [Tech Services] had more of an outward direction, there's plenty of people on campus. I think it could really be helpful for app development or the whole app development community and DoIT and at the engineering school. I think just connecting to those other networks would be really helpful."

Related to this, one participant noted that it would be helpful to have someone who could help navigate and advocate around the "tiered layer structure" of technology and support, from project-level to WCER to School of Education to UW and DoIT.

Data analysis software and support, particularly for qualitative data, was also frequently named as a need. The loss of access to the Social Science Computing Collaborative was bemoaned by several participants. Others wished for more support for Qualtrics and REDcap. One participant noted that "NVivo is buggy and we're looking at transitioning to MAXQDA. We'd appreciate having some MAXQDA licenses available." Another participant noted that not only was qualitative data analysis support needed, but that "quantitative people and statisticians" could benefit from "having people to bounce things off of," especially for Academic Staff PIs who "don't bang around in faculty meetings."

Hybrid meeting support was also mentioned by several participants. From meetings to seminars to small-to-medium sized events, people noted that hybrid participation will be needed in the near future and is probably here to stay. For example, one participant expressed the desire for "a camera that faces the front of the room in Room 259 to be able to do hybrid seminars."

Other needs identified for Tech Services were a "secure statistical computing environment" and the ability to provide a "more proactive approach to server administration," in relation to system problems or failures. The demand for Tech Services to be "more proactive" was expressed across many services, including communication and providing recommendations for innovative, cuttingedge technology.

TOP PRIORITIES

Finally, participants were invited to identify or reiterate their top priorities regarding Tech Services. Beyond, as one participant clarified, "keeping all the machines and the network running, because the whole thing falls apart if they're not doing that," participants provided many different answers to the request to identify their "Number 1 most important thing they needed for their research." This great variety underscores the multitude of needs and priorities across WCER projects, with the incumbent challenges in providing them.

Responses were organized by theme and are presented here, along with number of mentions:

- Creative, responsive collaboration on new technology ideas and problem-solving (5)
- Database security and data management (5)
- More proactive communication, particularly regarding Tech Services offerings, their staffing, and other limitations (4)
- Computer/hardware consulting and purchasing (3)
- Development services (2)
- Videography and video-editing (1)
- Communications technology offerings (1)
- Software purchasing (1)
- Improved, responsive customer service (1)
- Training people on AV equipment and other technology (1)
- Social Sciences Computing Collaborative access (1)

ADDITIONAL FEEDBACK

Participants were then invited to share any other feedback they had related to their needs from Tech Services. Additional feedback included:

- There is "angst" among WCER staff about whether Tech Services' staff has been cut too thin, becoming too small or too lean. People generally "feel for" Tech Services staff and the difficult situation they've been working in during the past months.
- With the "rush of recommendations" resulting from these focus groups, Tech Services must be given adequate support to evolve and make changes.
- Tech Services leadership should be "present in problem solving" during the staffing cutbacks, for example, "manning the door if it's going to be locked" or otherwise "stepping up." As one participant noted, "it's just something you do when something's on fire."
- It may be valuable to reach out to our various partners to get input on better integration of data systems.
- Consider "lateral connections" on campus among technology service people to help break down silos and to better help determine and provide technology solutions.
- Consider the possibility of having a "Chief Technical Officer" who advises projects on hiring
 appropriate educational technology staff directly to projects, perhaps helping manage them,
 to avoid over-hiring in Tech Services for specific projects, and the need to lay people off when
 budgets shift. It was suggested that having project-specific technical support staff might also
 address project deadline concerns.

- Poster printing is a service that many projects in WCER need, and the existence of a poster printer could be a worthwhile investment that provides a real boon to grad students and others on projects.
- Tech Services might consider creating short informational videos or pdfs posted on the WCER intranet site that describe the various things that Tech Services does and provides. These could be an accessible and focused way to let WCER staff know what is available, without "having to explain everything all at once" or over and over. It was suggested that this could be particularly helpful to those proposing for funding who could then better identify and describe the technology capabilities that they can list in their proposals.
- Consider providing training sessions on widely used software such as data analysis software, particularly for graduate students.
- Consider identifying a person/people, whether it be a Tech Services hire or within-project staff, to make basic website updates so that Janet Trembley can focus her time on the more creative aspects of her position.
- People in WCER projects need support in how to effectively manage and structure data.
- Investigate the feasibility of investing in a "HIPPA-compliant server or something with that level of security" or alternatively, consider "paying others [with such server capabilities] to use their space."
- Look to the editing services in WCER as a "nice model" for proactively reaching out to PIs when they are planning and writing award proposals.

In addition, several participants also expressed the desire for similar focus groups to be held pertaining to the WCER Communications Office and the Business Office.

SECTION 2: KEY FINDINGS AND RECOMMENDATIONS

A list of key findings derived from the focus groups accompanied with recommendations follows:

1. Computer support and internet/server access are perceived as the most core functions of Tech Services and are roundly seen as responsive, timely and effective. "Keeping the machines running and connected" and similar feedback were mentioned most frequently as the fundamental technology needs by focus group participants. Both the services and the staff providing those services were repeatedly complimented. For some participants, these are the sole areas of support that they seek out.

Recommendation #1: Strive to maintain computer and connectivity support in the timely, friendly, and effective manner that WCER staff are accustomed to.

2. **Tech Services tries to wear many hats, but there are fewer heads these days.** While many participants bemoaned the lack of certain supports, others acknowledged that highly specialized knowledge and skills are required for many of the types of services that Tech Services offers and/or that WCER staff would like them to offer.

Recommendation #2: Determine the areas where you can excel and provide excellent referral services for the rest. Tech Services should consider determining what their "core competencies" are, perhaps shorten their menu, excel in the selected competencies on their revised menu, and be very knowledgeable, supportive, and proactive about referring WCER staff elsewhere for needs they cannot provide.

3. There is a pervasive lack of knowledge and misinformation about current Tech Services offerings. Some participants expressed a lack of clarity about Tech Services offerings and policy, both before and since the staffing cuts. Numerous participants were concerned over the changes in services due to staffing cuts at Tech Services. There was a general lack of awareness over which services had been cut and some misinformation was identified. Many expressed disappointment that services they considered vital to their mission had been discontinued or moved outside, with some finding out about these changes due to discussion within the focus groups themselves.

Recommendation #3: Prepare and execute a communication plan to clearly address these service changes as well as continuing supports, including what resources are currently available and whether they are paid for by overhead or in other ways, newly outsourced supports and how these may involve cost differentials, recommended means for engaging support, and expected timelines for various forms of support. Any future changes to Tech Services support should be clearly and proactively communicated. Communication from Tech Services leadership will likely have more impact than from Tech Services staff members. Proactive rather than reactive communication going forward will be better received.

4. Web and application development services and research technology consulting elicited notable disappointment and frustration among participants. Areas identified as needing improvement included responsiveness, creativity, awareness of current and cutting-edge technologies, and willingness to problem solve. Participants often reported being told "no" when they came with requests, without any referral to other sources of support. Although it was not the case across the board, customer service techniques in some areas of Tech Services were perceived to need improvement.

Recommendation #4: Consider the feasibility of having a staff member with expertise in both research (including research methodologies, data collection and analysis, etc.) and cutting-edge learning and research technology. This person would be available for consulting on both preaward planning and other opportunities for problem-solving and creativity. This person would also be aware of and in ongoing collaboration with technology resources and experts both around campus, and when necessary, beyond. Instead of telling WCER PIs and others "no, we don't," Tech Services can proactively suggest solutions to problems and connect WCER researchers to resources wherever they may live to potentially make these solutions happen.

Recommendation #5: In addition to or in lieu of Recommendation #4, identify technology consulting and support counterparts, groups, and individuals around campus, build collaborative networks, and develop a robust system of referral that is delivered proactively to WCER. By connecting with the broad range of expertise across campus (participants mentioned groups in the School of Engineering, Division of Continuing Studies, and elsewhere), a resource referral network could be developed that could be used when consulting with WCER staff for research and other problem-solving needs.

Recommendation #6: Consider providing professional learning around customer service skills to Tech Services staff. This could come in the form of training, workshops, and/or universal or targeted mentoring, which could leverage the skills of those who already excel at customer service.

Recommendation #7: Investigate the viability of a technology interest group at WCER to help promote and share knowledge and experience in the use of cutting-edge educational and research technology, and solutions to problems.

5. Maintenance of and support for conference room audio-visual equipment, though used less frequently these days, still troubles WCER staff. Maintenance of, instruction in the use of, troubleshooting, and emergency support are all of key importance to users, and use of these facilities will likely increase as people return in larger numbers to the building. Similarly, the need for hybrid-format events will likely grow and remain an important tool for the foreseeable future.

Recommendation #8: Determine the most effective systems for maintaining the conference rooms in working order and providing support for those reserving the facilities including emergency troubleshooting. Investigate ways for users to engage emergency support without having to run up to the third floor and pound on the locked door.

APPENDICES

APPENDIX A: FOCUS GROUP PROTOCOL

WCER Tech Services User Focus Groups
Protocol—finalized—revised—October 5, 2021

Intro: I'm Robin Worth, a researcher/evaluator with WEC. WCER Tech Services has contracted with me to conduct a series of focus groups to find out more about what services PIs, Project Managers, and other WCER stakeholders need from them, and to help determine what Technical Services at WCER should look like in the next 5-10 years.

Standard language on confidentiality—recording permission—data use and reporting—etc.

- 1. First, I'd like to go around the room and have everyone introduce themselves, and tell us your role in WCER (project, center, etc.).
- 2. Now I'd like you to tell me what words or phrases come to mind when you think of WCER Technical Services as it currently exists?
- 3. Now I'd like to hear about your interactions with Tech Services staff.
 - a. How often do you interact with staff in Tech Services?
 - b. Do you tend to interact with staff in tech services (email, phone, stop in, etc.)?
 - c. How did you feel about the interactions with Tech Services staff? (probe for ease of contact, friendliness, helpfulness, timeliness, clarity in communications, "speaking the same language, I.e., ability to communicate your needs, etc.)

- 4. How do you currently use Tech Services? (Probe for what services- refer to list)
- 5. Tech services provides a wide variety of services, including ones I've heard mentioned in this group (list), as well as others I haven't heard mentioned. Now I would like to gauge your awareness of the services that Tech Services provides. I'm going to read you a list of their services and then ask which ones you were NOT familiar with. (refer to list). Which services that I listed were you unaware of? You can also provide me with any feedback about the services that you may have.
- 6. Thinking of your current and future research projects, what do you think your technical services needs would be? Probe for services that are already provided and those that aren't currently provided. Would they be likely to approach WCER Tech services for them or go elsewhere? Why/Why not?
- 7. What would you say is the #1 most important thing Tech Services could do to be of most use to you and your research?
- 8. What, if anything, else would you like to tell me about this topic?

APPENDIX B: WCER TECHNICAL SERVICES SERVICE CATEGORIES

Service Categories

- Accessibility
- Accounts and Access
- Application Development
- Communication and Collaboration
- Consulting, Support and Training
- Infrastructure and Storage
- Internet and Networks
- Media & Design Services
- Research Technologies and Support
- Security, Safe Computing and Privacy

Accessibility

Tech Services will ensure that all web sites and applications designed and constructed by Tech Services meet all applicable accessibility standards with the goal of being AA compliant. Tech Services will also perform usability research through focus groups and apply best-practice design standards for all web sites and applications designed and constructed by Tech Service to ensure the application meets end user needs with an intuitive workflow and user interface.

- Accessibility Consulting—We will no longer provide this service to projects and will refer PI's to DOIT
- Usability Consulting—We will no longer provide this service to projects and will refer PI's to DOIT

Accounts and Access

- Tech Services manages an active directory service in collaboration with MERIT that facilitates
 the authentication and authorization for access to all School of Education network resources
 including file servers, database servers, sFTP sites, and application servers. We will continue
 to provide this service
- Identity and Access Management—Active Directory configuration, encryption key
 management, security group configuration and management will continue to be provided and
 supported by indirect funds. Federation via Identity Server or Shibboleth will be provided if
 we have capacity and will be charged to projects.

Application Development

Web application and desktop application development and database design.

- Web and Desktop Application Development will be provided if we have capacity and will be charged to projects.
- Web and Application Design Consultation will be provided if we have capacity and will be charged to projects.
- Application Development Project Management will be provided if we have capacity and will be charged to projects.

Communications & Collaboration

This includes conference room teleconference support, document management, mass email configuration, and event management.

- Audio and Video Conferencing—We will continue to provide this service
- Document Sharing—BOX Configuration, Secure File Transfer Server will continue to be provided
- Email ListServer Management, project email configuration will continue to be provided
- Event Management Small events that only need a signup page and a credit card charge will be supported. Larger events will be referred to Place.

Consulting, Support and Training

This includes Education Science conference room AV assistance, technology equipment loans, secure data processing, security training, software purchases and basic IT help desk support.

- AV Support for Education Science Conference Rooms will continue to be provided
- IT Help Desk-First Line Support will continue to be provided
- IT Equipment Loans will continue to be provided we have the resources to maintain a pool of equipment
- Secure Computing—Cold Room and Application Delivery Server will continue to be provided
- Software Library—Provided on Application Delivery Server will continue to be provided;
 specialty software may be charged to project
- Software Purchase and License Management Consulting on software purchases will be referred to DOIT. License management will be delegated to projects
- Security Awareness Training—We will depend more on DOIT Cybersecurity. We will provide onboarding security awareness training

Infrastructure and Storage

This includes the management of the School of Education data center, server hosting, storage management, backup and recovery, network management, hardware purchasing, database management, security, identity management and access control.

- Physical Server Hosting—includes environmental, physical security, power management, patch management will continue to be provided.
- Cloud Hosting including configuration, management, patch management, basic server maintenance, and vendor qualification will continue to be provided.
- Virtual Machine Hosting including configuration, patch management, and basic server management for guest server platforms will continue to be provided.
- Data Center Disaster Recovery Planning and Execution will continue to be provided
- Storage and Backup Services including SOE SAN, BOX, Google Drive, OneDrive will continue to be provided.
- Hardware purchasing laptops, desktops, servers, routers, storage, peripherals purchase and configuration will continue to be provided. We will provide a list of supported equipment available on our web site. Actual purchasing will be handled through the business office
- Database Hosting—Includes server configuration, database configuration, tuning, specification and implementation of backup strategy Costs will continue to be provided.

Internet and Networks

This service includes configuration and monitoring of the School of Education network (wired and wireless), IP address space management, router configuration, firewall configuration, DNS configuration, and management of project domain names.

 Network services - LAN, WAN, VPN, VoIP, Wi-Fi, IP Management, DNS Management, firewall management, router configuration and management Domain Name Management, will continue to be provided

Media & Design Services

This includes website and print graphics, illustrations, and logo design. This will not include multi camera video and video editing.

- Graphic Design and Illustration—Supported by indirects for logo and basic website if capacity allows, otherwise charged to project. Does not include animation or detailed drawings
- Videography including multi-camera video capture and editing will no longer be provided

Research Technologies and Support

This includes both pre- and-post award consulting on topics such as technology budgets, data architecture, data acquisition and management strategies, as well as overall project technology strategy.

• Pre-Award and Post-Award Planning will continue to be provided

Security, Safe Computing and Privacy

This service includes security policy definition, group policy definition, network monitoring, and training.

• Security Services - network monitoring, log monitoring, firewall rule management, security policies, privacy policies, antivirus, and patch management (OS and Application) will continue to be provided

Technical Services Focus Groups

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