In December 2013 the Technology Learning Committee (TLC) created a Classroom Technology subcommittee in an effort to gather faculty feedback and identify improvement for classroom technology on campus. This subcommittee, composed of faculty and technology staff, created a classroom technology survey that was vetted by the TLC in January 2014 and distributed to the UA faculty in February 2014. The following report summarizes the results of the survey and includes recommendations made by the subcommittee on ways to move forward.

Results
Total participants: 390
When asked what equipment faculty felt should be included in standard classrooms, the majority of faculty listed an instructor station (podium and projector), wifi capability, laptop connections, and whiteboards. More than 50% of the faculty also included a non-tech wood podium, DVD player, and interactive monitor.

When asked how they preferred to learn new features, the majority of the faculty stated that they preferred individualized learning by physically observing it being used, through on-the-spot experience, or from on-site instruction. When asked how they preferred to receive notifications regarding classroom issues or updates, over 75% of the faculty preferred receiving emails and 37% preferred a dedicated website.

While the majority (>85%) of faculty use a learning management system (Blackboard Learn) and presentation software, fewer faculty (<25%) were using other instructional technology tools, such as lecture capture (Tegrity), response systems (clickers), annotation (Smart) and web communication (Skype). When asked why they do not use it, the majority of respondents (>50%) stated that they did not use lecture capture, response ware or annotation software because these items were not necessary in their teaching. The second largest set of respondents (18-30%) said that they did not use these three programs because they did not know how to use them.

Throughout the survey, participants were invited to insert their own comments and provide feedback. The majority of faculty emphasized that they wanted reliable technology and standardized classrooms. Some faculty pointed out inefficiencies with the current systems, like the fact that some rooms had help phones installed across the room from the podium and that in many of the rooms, the faculty cannot simultaneously use the whiteboard and projector. Others requested upgraded wireless so that classrooms can be BYOD (bring your own device) compatible.

At the end of the survey, participants were asked if they were interested in acting as consultants for teaching technologies and technology in classrooms. Almost one third of the participants stated that they were willing to provide additional feedback and input regarding classroom technology.

**Recommendations**

Based on the survey results, the classroom technology subcommittee provides the following recommendations:

Create a distribution list of all participants who volunteered as consultants. This Classroom Consultants distribution list will be named UA-CLASSROOM. Use this list to communicate with the faculty regarding new technologies and alternatives to existing technologies on campus. In order to avoid overextending this resource, the committee recommends that communications with this group be limited to
Test alternatives to Smart.
Since Smart has historically been one of the main contributors to multimedia problems, the Center for Instructional Technology (CIT) will continue testing and researching alternatives, specifically agnostic annotation devices using Microsoft Ink. It is likely that a series of questions for the faculty will emerge during this testing process. These questions will be posted to the UA-CLASSROOM listserv for further feedback.

Test alternatives to other technologies.
Faculty often request that UA consider alternatives to the current instructional technology. Although the CIT and other technology groups research alternatives, some of these programs are rejected based on financial or feasibility criteria. The subcommittee proposes that the TLC committee continue to review alternative software programs whenever current contracts are coming due. When the TLC committee identifies software that may be feasible, it is also recommended that these alternatives be brought to the attention of the UA-CLASSROOM listserv and other interested faculty to determine overall interest. If the TLC committee turns down software programs due to feasibility issues, pricing, etc., it is recommended that this information be documented in a brief memo that is communicated to the UA-CLASSROOM listserv and any interested UA faculty and posted on the CIT website. This would provide a source of information for technology staff and faculty who were interested in exploring new instructional technologies or who had submitted requests for certain tools, and it would provide the TLC committee with a reference point when researching alternatives in future years. Since the memos would include the reasons that the software was rejected, they would also provide the possibility for these alternatives to be revisited again down the line as technology and infrastructure on campus and with the various vendors improve.

Identify classrooms that could be converted into wireless hotspots.
The Office of Information Technology (OIT) will examine the current multimedia classrooms and identify possible rooms where the wireless could be boosted for high capacity use. This would allow faculty who are interested in having students use technology a place where the wireless would be robust enough to handle the increased capacity. The technology groups around campus will be asked to relay any previous requests for this type of technology, TLC committee members and the UA-CLASSROOM listserv will also be asked to make recommendations for potential targets. Based on this feedback and a feasibility study, OIT will recommend a list of rooms that meet the criteria, which will be sent as a proposal to upper administration for funding.

Set up communication system for technology updates, maintenance, and issues.
Individuals in CIT will examine the current tracking system used to log classroom calls and issues to determine if there is a way to incorporate the software with a real time online website accessible to the faculty. If this is not possible, then CIT will work with OIT to create a website used by all three technology groups to post known issues, maintenance updates, and upgrades to classroom software so faculty have a centralized source of information.

**Standardize all multimedia classrooms.**
The current classroom equipment specifications were developed in 2011. The differences most commonly seen between classrooms on campus are generational and based upon changes in technology and regulations over time, or based on the architectural details of a particular space and the challenges of properly integrating A/V into it. As classrooms reach the end of their life-cycle they will be upgraded to the current standard and will match the technology and connectivity of modern devices. While most of the equipment and capabilities recommended by the survey participants is already existing in the current classroom design, any possible additions or revisions, as well as designs for new classroom spaces, will be discussed within the TLC and involve the UA-CLASSROOM listserv or other faculty as needed.

**Additional Notes**
Some of the survey participants requested that items such as dongles and adapters be included in technology classrooms. Unfortunately, it has been the experience of several technology groups that items not permanently connected to the multimedia tend to go missing. Additionally, due to the varying models, one dongle/adapter will not suffice. Due to the portable nature of these items, the varying models, and not being able to adequately track them, the subcommittee does not recommend that portable adapters and unique cables be provided in standard multimedia classrooms, but instead that individual faculty obtain connectors that are relevant to their devices.