From Eye to Insight

Software for the Microscopy Classroom

MAKING CLASS INTERACTIVE AND INSPIRING

AirTeach Software Bundle

DIGITAL MICROSCOPY CLASS

Replace the blackboard with the students' tablets

Students and their mobile devices are inseparable. The Wi-Fi Education Solutions from Leica Microsystems allow teachers to meet young minds - and engage them inside the classroom and beyond.
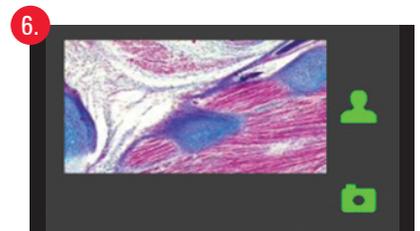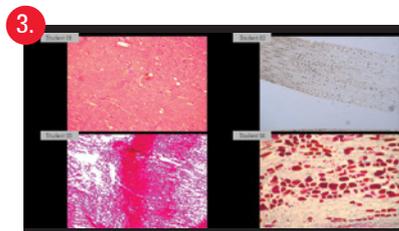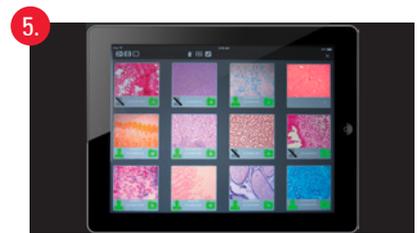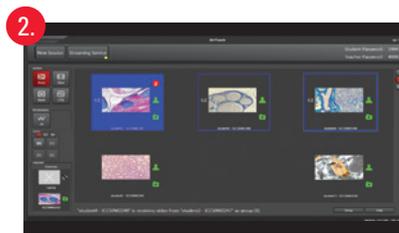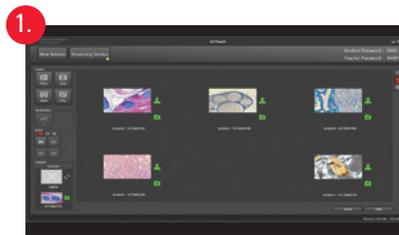
With students' microscope images live-streamed directly onto their mobile devices or shared with the whole class for group discussions class becomes interactive and inspiring.

The AirTeach software from Leica Microsystems provides teachers with a tool to share knowledge efficiently, and have everybody on the same page, all the time.
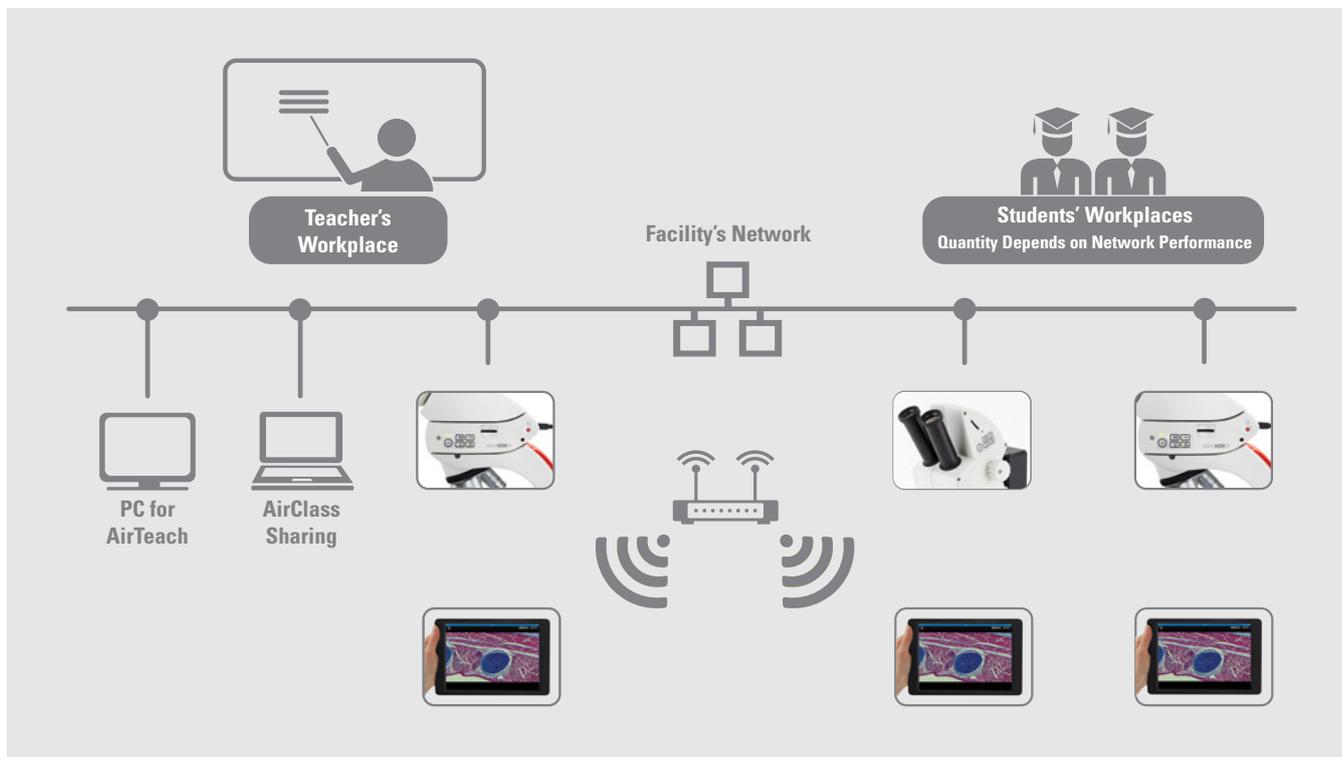

AIRTEACH EMPOWERS TEACHERS TO:

1. See a thumbnail view of students' microscope images in the layout of the classroom.

2. Control which images are shared for class discussion.

3. Share up to four images on a large display or projection to allow a comparison of students' findings.

4. Switch to a presentation or other computer content, with the AirClass sharing function to keep students' attention.

5. Walk freely in the room to give students individual attention, while controlling student's images from a mobile device.

6. Confirm students are logged in to ensure participation.

CHECKLIST FOR IT INFRASTRUCTURE

1. Laboratory equipped with cameras from Leica Microsystems which are Ethernet compatible. Select live resolution and maximum frame rate limit suitable for the network performance.
2. Ethernet connections for all microscope workplaces
3. For cameras and PCs: 1 Gigabit Ethernet network ports
4. Dedicated network switch for the classroom.
5. Network capacity of 5 MBit/s per camera is required for a camera setting of 800x600 with a framerate of 10 fps.
6. Dedicated 5 Ghz/ac standard Wi-Fi access points for the classroom. There should be a separate access point for every 10 connections of student mobile devices or laptops connecting to the network.
7. One Windows PC for AirTeach (touchscreen or standard), one Windows PC for content sharing and live image streaming (see PC specifications below), and one projector or large screen display.
8. Mobile devices (teacher: iOS 8+ | students: iOS 8+ or Android 4.1+) using 802.11 ac Wi-Fi standard and latest version of AirLab App.
9. If Wi-Fi connections of devices are in a different subnet than wired connection of the AirTeach PC, please provide a non expiring static IP address.
10. Please confirm the following ports are opened within the network where the cameras and PCs are connected by cable and the mobile devices are connected by Wi-Fi:

> TCP 80 (HTTP)	> UDP 8554 (RTSP)
> TCP 8080 (HTTP)	> TCP 8554 (RTSP)
> TCP 8081 (Login, classroom communication)	> UDP 554 (RTSP)
> TCP 8900 (RTSP Proxy Server Management)	> TCP 554 (RTSP)
> TCP 8082	> TCP 8555 to 8605
> TCP 8085 (HTTP)	> UDP 8555 to 8605
> UDP 8086 (Broadcasting)	> UDP 5353 (Bonjour DNS)

11. PC specifications:
    - > Disable: firewalls, sleep mode, power saving, auto network disconnect modes, and anti-virus programs
    - > Hard drive: 256 GB or larger (SSD preferred but not mandatory)
    - > CPU: Intel Core i7
    - > Monitor: 22" or larger (optional touch screen for AirTeach PC)
    - > Network: 1 GB Ethernet port
    - > Connected to network by cable (Wi-Fi disabled)
    - > Memory: 16 GB
    - > Bonjour installed on both PCs
    - > AirTeach installed on AirTeach PC and set to extended screen view
    - > AirClass installed on content PC, must be set to only one monitor (no second screen connection possible)
    - > Windows 8.1 minimum

Order No.:	13 613 750: AirTeach Software Bundle
Remark	Microscopes and cameras to be purchased separately

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