

## **CLARIFICATION**

The information below is intended to provide clarification of specific requirements of the Wireless Classroom Initiative.

### **Photographic Documentation during Initial Site Survey**

The site survey template contains a section for providing pictures of proposed wireless access point (WAP) locations. School and vendor personnel have expressed concern that taking these pictures may be disruptive during school hours. The intent of the pictures is to provide a “before” and “after” comparison of the proposed placement and the actual placement during implementation. The WCI Advisory Group has determined that, if taking pictures during the initial site survey is disruptive to the school, a notation of the anticipated placement of WAPs on diagrams and heat maps is sufficient. Pictures of WAP placements are still required for the post-implementation walk-through.

### **Access Point Placement and Coverage**

The goal of the Wireless Classroom Initiative is to provide wireless access to all students in active instructional areas (i.e. core classrooms and library/media centers) while taking into account the possibility that students may have one or more active wireless devices. After careful consideration based on questions presented to RIDE by both vendors and LEAs, RIDE would like to provide a clarification regarding the placement and coverage requirements of the wireless access points (WAPs).

It is understood that different brands and models of access points have different capabilities such as power output, range, and number of simultaneous connections - ranging from dozens to multiple hundreds of devices at the same time. Regardless of the solution proposed, access points and their placement within a building should provide sufficient density, bandwidth, and signal strength to cover all students located within the area that access point is designed to cover. While in many cases this results in a situation with one access point per room, it is not a requirement.

Therefore, there are no specific restrictions on the placement of the access points. Depending on the specifications of the equipment used in the wireless solution and the student population within wireless range, one access point may be capable of providing coverage to more than one classroom. Therefore, the situation may exist where multiple rooms can be covered by a single WAP located centrally to those rooms. When designing the wireless solution, vendors should operate under the assumption that students may have up to 3 wireless devices per person.

In the event of an access point failure, the solution must expand neighboring access point coverage to eliminate any uncovered areas and provide basic wireless access for at least one device per student.

### **Cabling**

All new cabling should consist of Cat6 Plenum cable or greater and certified for gigabit throughput and PoE+. No cable shall exceed its maximum recommended length (i.e. 100m for Cat6). Existing Cat5e cabling does not need to be replaced unless damaged. Any cabling Cat5 or lower-grade, or cabling incapable of supporting gigabit and PoE standards, should be replaced.