Magic Leap – Broward Schools Partnership Agreement

Frequently Asked Questions

2019-2020 Implementation

- **What is the age restriction on Magic Leap One creator edition device use?**

Currently, use of the Magic Leap One headset is restricted by Magic Leap to ages 14 and up. With this partnership, all schools with students ages 14 and up will have the opportunity to be trained and use devices through the Mobile Spatial Computing sandbox. The goal is to have as many students as possible experience using and creating with the technology.

- **What were the criteria for selecting the pilot schools?**

The three pilot schools (Plantation High (District 5), Coral Springs High (District 4) and Blanche Ely High (District 7)) were selected by CTACE with Applied Learning STEM+CS consultation. The teachers were selected for this pilot year based on their prior experience implementing new computing curriculum. The spatial computing course is building on this experience to expand the students' experience beyond web development to development of spatial computing applications compatible with the Magic Leap device. The three teachers are experienced in implementing cutting edge curriculum and computer science through Unity programming. These three schools represent a cross-section of the District and will serve as a pilot for potential scaling in 2020-21.

- **How were the mentor teachers selected? What were the criteria?**

The mentor teachers include the 3 teachers from the spatial computing pilot schools (representing Districts 4, 5 and 7) plus 4 teachers to represent the remaining board zones (Districts 1, 2, 3, and 6). These additional teacher mentors are being invited based on their experience in teaching computer science and/or CTACE IT courses and successful participation in past computer science professional development (such as Code.org's year-long program). The mentor teachers are not yet finalized. Once the agreement is approved, we will approach the school administrators to assure that they can meet the professional development and release time required of a mentor teacher:

Professional Development

REQUIREMENT:	DESCRIPTION:
Onboarding 1-day	Magic Leap Device Training
Spatial Computing Training (2-days)	Foundations of Programming Curriculum Training
August Follow-up 1-day	Spatial Computing Course Implementation Follow-Up
Quarterly Follow-ups Sub Days 4x1-day	Follow up from summer PD and mentor work
Release Time to mentor 6x1-day	Time for mentors to work with teachers in their zone

- **Explain the project plan for the Foundations Spatial Computing Course.**

The Foundations Spatial Computing Course will be the curriculum for the CTACE/Computer Science course "Foundations of Programming". The goal is to help students gain computer science skills through developing applications for the Magic Leap One device. The curriculum for the spatial computing course is free from Unity and Magic Leap, and the support from Magic Leap is included in the agreement (Attachment A). Applied Learning and CTACE have spent the past semester developing the curriculum detailed course outline and a canvas course shell for use in the training. The initial teachers and district facilitators participating in the Magic Leap training will continue to add to these resources. The lessons will be implemented with the pilot classes and the curriculum revised based on the pilot experience in order to build capacity for scaling the course in future years. In addition to Magic Leap, Unity Software has also offered their support in the course development and implementation at no cost to the District.

- **How will the mentors work with the schools in their district?**

The seven teacher mentors will be selected from experienced computer science and CTE teachers to best be able to mentor other teachers in their Board Member zone schools. Additionally, permission from the school administrator will be required for the teacher to commit to the professional development and release time to share their knowledge within their zone and their expertise to assist in building a spatial computing pathway across the District.

  - Draft Teacher Mentor agreement: http://bit.ly/BCPSMagicLeapMentor
  - Teachers – with 7 mentors having 6 release days we anticipate reaching 42 teachers in 2019-20
  - classes – 210 classes reaching 6,300 students
  - number of devices – each mentor has at least 1 device with the capacity to check out additional devices from the Spatial Computing Sandbox. The teachers at the

3 spatial computing course schools will each have 15 devices for use in daily teaching that could be dual purpose for working with schools in their district.

- **Do we have curriculum?**

Curriculum for the foundations spatial computing course is discussed above. The curriculum for the Spatial Computing Sandbox and the Mentor Teachers will be built from both the spatial computing course and some third-party curriculum related apps that are available now and being developed for the Magic Leap One. The initial applications for the Magic Leap One that the teacher mentors will likely roll-out are Create (art/graphics), Tonandi (music), and others (https://www.magicleap.com/experiences). Additional applications are being developed and will be added as available, for example apps demonstrating climate change/sea level rise using current and future Broward specific data, brain surgery, Royal Shakespeare Company, marine science/coral reef preservation and more. It is anticipated that this first year will be focused on providing students and teachers the opportunities to experience the capabilities of the system as we move toward spatial computing integration in all areas of the curriculum.

- **How and to what extent is Magic Leap supporting the teachers?**

    - Attachment A to the agreement indicates categories of support to BCPS from Magic Leap and this support represents minimum number of hours anticipated with Magic Leap.
    - Magic Leap is conducting and hosting the initial on-boarding professional development and is committed to accompany facilitators in the initial roll-out of the sandbox devices in schools.
    - Magic Leap will provide general curriculum advice, course selection, exploring mentorship opportunities, and other curriculum development support (e.g., technical guidance (e.g., workflow for device access) and light pedagogical guidance (e.g., learning resource engineering advisory support to ensure that development courses take advantage of Magic Leap best practices)).
    - Magic Leap will invite teachers and students to visit Magic Leap HQ for field trips related to their development of apps for the Magic Leap One device.

- **How will the PD work?**
    - Two courses have been created in LAB for in-service points
        - Magic Leap Onboarding – a 1 day, 8 in-service points course that will be initially all face-to-face as a “train the trainer” for district facilitators and initial mentor teachers facilitated by Magic Leap. It is planned that this

training will then be a “blended” course facilitated by the District facilitators and teacher mentors using face-to-face in combination with a Canvas course and provided to teachers that will be leading student experiences with the sandbox devices. This course in LAB will provide a method of “certifying” a teacher before they can borrow/use the sandbox devices.

- Computer Science Spatial Computing – a 3-day, 24 in-service point course on getting started with app development in Unity for the Magic Leap One creator edition. This will be initially provided by Magic Leap to district facilitators and mentor teachers in preparation for the 1-year high school Foundations course.

- Quarterly mentor teacher professional development – 1-day per quarter for professional development on integration of spatial computing applications into all content areas. This is especially important to integrate the latest applications as they become available in Magic Leap World. Magic Leap will support this with connections to their internal application developers as well as partner developers.

- **How will the Mobile Spatial Computing Sandbox work?**
  - **How will classes be selected?**

    This will be similar to how we select classes for using Google Expeditions, schools will be provided a list of applications and curricular connections through a Canvas course to use in planning and they will contact us to schedule an “onboarding” professional development indicating their proposed curricular connection. The teacher will receive the “onboarding” training and will then be able to check-out devices (likely not all 30 at one time to allow a broader distribution depending on quantity of requests). In addition to the use of apps within the curriculum, it is anticipated that some of these devices will be checked out by teachers introducing spatial computing programming in class or in clubs (for example, Lauderhill 6-12 has been working for the past year on Unity development anticipating being able to check-out devices).

  - **How many devices are in the Mobile Spatial Computing Sandbox?**

    There are 30 devices thanks to the donation of devices from Magic Leap and the Florida Panthers Foundation facilitated by the Greater Ft. Lauderdale Alliance (25 from Florida Panthers Foundation plus 5 from Magic Leap). All are donated.

- **Do we have curriculum?** See the answer above re: curriculum the teacher mentors are using and the professional development the facilitators and mentors will become trained to facilitate.