
Google™ Apps for Education

CS K-12 Teacher Curriculum Testing

Pilot - Johannesburg, South Africa

October 25th, 2014

Context

The project scoped for one of our team interns this past summer was around researching and creating Computer Science (CS) resources that would be of value in order to get middle school CS teachers to the next level in teaching these subjects to the students as well as having them develop additional curriculum resources that will work in their home countries with an ultimate aim to influence the K-12 student audience to be excited about CS and choose it as a future career option.

The result of the project, among other things, was the creation of a **Logic, Algorithms and Computational thinking lesson and activity examples** composed of starter activities and main activities that secondary school teachers could pick and choose from in order to complement their course or to run in parallel to their course to enhance students capabilities.

Target Audience

Students: The **main target** audience of these example CS lessons are the **K-12 middle school students**, since we hope to influence this. The teachers are the channel to get to them the CS knowledge.

Teachers: For the purpose of the testing the **main target audience** we want to get input from **teachers**. For the purpose of having meaningful content, a small sample of teachers with a variety of profiles is instrumental. Regionally, the aim is to get different teacher profiles with different CS levels: from the teacher that focuses on ICT and computer usage basics with no CS background to the teacher who focuses on programming fundamental with a CS background.

Besides, teachers from other subjects aren't excluded from participation as long as they are "techy", have an understanding of Google tools and how these work and are excited about taking part in this.

Project Testing Goal

Through the CS K-12 lesson example testing we would like to **make sure the produced resources are relevant for EM middle school teachers and EM middle school students** to have the right CS influence and that the format via which these would be delivered is also suitable for the teachers.

Additionally, we would like to leave **teachers with something they could pursue in their classrooms the week after the workshop**.

Workshop Materials

During the workshop **3 topics will be reviewed: logic, algorithms and computational thinking**.

Location:

SSA (Johannesburg, South Africa)

- Date: 25th October (fixed)
- Facilitator: Google

Online:

- Teachers: We will be hosting live workshops with a minimum of 20 teachers per location.
- Duration: The workshop duration will be 4-6 hours and the format will be similar to that of a usability/UX testing with a facilitator.
- Content: We aim to test one starter activity and one main activity for all 3 topics: logic, algorithms and computational thinking

Workshop Testing Follow Up

- Teachers to come up with a lesson they could pursue in their classroom the following week
- Brainstorming of a one-week syllabus plan
- Empowering the teachers to share additional feedback on what worked/didn't work in a week time from the workshop through a G+ community
- Sharing of one-pager in CS resources