Team KAR HW6

**Problem Area 1:** Feedback for teacher content/delivery

**Description of Problem Area:** Teachers usually close their doors and are alone with their students. They rarely have the opportunity to collaborate with other teachers and receive feedback on their curriculum and delivery of it.

**Mission:** Use the power of technology to provide real-time feedback to teachers

**Populations:** K-12 Teachers in U.S.

**Design Inspirations:**

* How can an app provide new avenues for feedback on curriculum content and how the teacher delivers it?
* What is the most effective way to provide constructive feedback for teachers?
* Which evaluators provide the most helpful feedback? Students? Teachers? Instructional Coaches? Principals?
* What are existing procedures for feedback? Can we modify it to make it better?
* How can technology enhance the process of receiving feedback?
* How often do teachers currently receive feedback? How often do they wish they could have feedback?

**Competitive Analysis**

* [ClassForward](http://classforward.com/): video based platform where teachers can share classroom videos with coaches, supervisors, mentors or peers.
* [Mursion](https://mursion.com/): educators practice their teaching techniques on virtual reality simulations children.
* [Playful Assessment](https://tsl.mit.edu/playfulassessment/) at MIT Teaching Systems Lab: creating ways of assessment (including for teachers) that are gamified. They use a variety of role-playing and card games to accomplish this.
* [Instructional Coache](https://www.teachingchannel.org/videos/benefits-coaching-teamwork-nvps)s: designated people within a school district who provide feedback to teachers. Usually these resources are scars - only 1 coach for 2 schools. The video shows a teacher reflecting on feedback given my instructional coaches.
* [Authess](http://www.authess.com/): expose and measure in-demand skills through scenarios
* [Kaizena](https://kaizena.com/): tool within google docs that allows quicker feedback to be given to students. This could conceivably be used by a teacher trainer to a group of teachers as well.

**Problem Area 2:** Constructionism/gamification techniques for teachers

**Description of Problem Area:** Teachers need to deliver interactive and engaging content to students. They have specific curriculum for what they need to teach but have flexibility in how they teach it. Teachers may want to incorporate constructionist pedagogy into their classrooms but need guidance to do so effectively.

**Mission:** Redesign the learning experience through the gamification of educational content.

**Populations:** U.S. K-12 Teachers, U.S. K-12 Learners

**Design Inspirations:**

* How do teachers learn new pedagogies currently? Is it effective?
* How do teachers currently encourage problem solving and creativity?
* How can an app keep K-12 learners engaged in their school material? Will learners benefit from gamification of materials?
* How can an app encourage creativity and problem-solving in students via gamification?

**Competitive Analysis**

* [Scratch](https://scratch.mit.edu/): visual blocks-based programming language that students can use to create graphics online
* [GoalBook](https://goalbookapp.com/): transform instruction with researched-based best practices for teachers
* [ClassDojo](https://www.classdojo.com/): build the classroom community by creating positive culture with an app that parents, students, and teachers can communicate on
* [Logo Training](https://eurologo.web.elte.hu/lectures/valente.htm): analysis of online training for teachers using Logo in the classroom.
* [CK-12](https://www.ck12.org/student/?_ga=2.147372407.1935349623.1509327579-933453199.1509327579): personalized learning (Create digital classrooms, customize textbooks, and learn K-12 STEM concepts) for students
* [Duolingo](https://www.duolingo.com/): fun and interactive way to learn a language
* [Learning Beautiful](https://www.learningbeautiful.com/): tangible computational thinking toy for kids
* [Osmo](https://www.playosmo.com/en/): interactive iPad AR game for hands-on play