**Brain Tank- Chatbot Challenge**

Many students lose the opportunities to excel in their education with no fault of their own. According to the National Center for Education Statistics, 35% of students between the ages of 3 and 21 are victims of specific learning disabilities (NCES, 2017). Additional percentages of learning disabilities are portrayed in figure 1. In vulnerable communities, students face additional learning challenges due to traumas or specific experiences that are caused by the crises in their areas. According to the UNHCR, bullying, people with uniforms and boots, and the existence of multiple organizations participating in the children’s lives impact their educational performance (UNHCR, 2016). In refugee camps, specific impacts on education seize to be detected due to the high number of refugees, lack of resources, and lack of proper means of communication for such issues.

This is where our Chatbot comes in. With education, people expect chatbots to be used by students for facilitate the learning. However, students are not expected to notice their own abnormalities in their learning progress. Therefore, the primary users of our chatbot shall be parents and/or teachers. When users notice abnormal behavior from their students, they can use the chatbot to communicate their observation. The chatbots job is to detect the problem by matching the users’ observation, and symptoms from learning disabilities that are stored (or pulled from) specific databases. The Chatbot is certainly not a doctor’s substitute, which does not give it the right to inform the users of the possible disabilities from which the students are facing. This is a critical issue because a faulty diagnosis by the chatbot could trigger anxiety among users, or even lead to the wrong action plan with the student that could damage their learning progress significantly. Therefore, the chatbot contacts the centers or NGO’s that deal with the possible learning disabilities detected, and let the users know how to deal with the students until the respective centers contact the user for a professional opinion. The main challenges we might face with our chatbots are (but not limited to):

1. Inaccurate description (due to dialects or lack of awareness) by users which makes it harder to detect disabilities.
2. Users could be uncooperative or unwilling to use it due to denial or cultural barriers.
3. Students could be unwilling to receive treatment.

References:

"Children and Youth With Disabilities." The Condition of Education - Participation in Education - Elementary/Secondary - Children and Youth With Disabilities. The National Center for Education Statistics, May 2017. Web.

UNHCR's Learn Lab. "5 Challenges to Accessing Education for Syrian Refugee Children." UNHCR Innovation. United Nations High Commissioner for Refugees, 29 June 2017. Web.

