**Problem**: achieving personalization in higher education.

**Basis**: students learn more when course material is personalized to their learning style.

**– Develop a better definition of the problem (define). What are some of the underlying causes of this problem? (min 100 words)**

The problem is achieving personalization in higher education. The reason for this is that students learn more when course material is personalized to their learning style rather than having a one-size- fits all method of teaching. The problem that I’m presented with seems simple and straight to the point. However, according to Don Normal in his book *The Design of Everyday Things*,” Good designers never start by trying to solve the problem given to them: they start by trying to understand what the real issues are. As a result, rather than converge upon a solution, they diverge, studying people and what they are trying to accomplish, generating idea after idea after idea.” Therefore, rather than figure out ways of achieving personalization in higher education, it is important to first figure out why students need personalization in higher education and to define a more accurate problem to solve by figuring out the underlying causes of this problem.

Students in higher education have various different learning styles, personalities, and preferences for their majors. For example, engineers will most likely prefer a learning style that is more technical, precise, and logical. This example showcases that the root cause or underlying cause of trying to achieve personalization is due to higher education students having majors that require certain knowledge and skills that coincide with how they need to be taught. So, the problem should actually be defined as how to implement the correct teaching style based on the major/minor a student takes so that the student learns the proper knowledge and skills required for that major/minor.

**– Generate (ideate) multiple (at least two) potential solutions (min 150 words)**

Solution #1: Technology is transforming higher education. Software’s ability to play a key role in functions from course enrollment to classroom instruction to student lifestyle management is beginning to produce better ways for students to enroll in, learn at, and eventually complete college. In addition, these software tools are beginning to produce the kind of actionable data that will transform higher education. By incorporating technology in education students can learn the skills needed for their major whether its through zoom, or interactive software. This allows for ease of access learning which helps in implementing the correct learning style students need through self-paced learning.

Solution #2: Students should be encouraged to customize their learning experiences to reflect their interests and learning is at the pace of each individual student; this means students can move ahead when they are ready or take a slower pace until they fully grasp the material. Colleges or higher educational institutions should be more accommodating for all types of different schedules and styles of learning. Having classes on weekend, having classes later at night, being able to class completely online without any in-person meetings are some ideas on how colleges/universities can be more accommodating to students and letting them create their own personal learning environment which would help in establishing a preferred learning style.

**– For each solution provide some analysis of the trade-offs (pros and cons) of each (test). Create a list for each solution with min 2 pros and 2 cons each.**

Solution #1 Pros and Cons:

Pro #1: The IT infrastructure supporting college education processes makes it possible for students to register for a course more quickly, take courses online, or connect with campus tutors through social media platforms

Pro #2: Software’s ability to play a key role in functions from course enrollment to classroom instruction to student lifestyle management is beginning to produce better ways for students to enroll in, learn at, and eventually complete college.

Con #1: Implementing more technological freedom in higher education means there will be less face-to-face interactions between teacher and student can help students not just acquire facts, but to understand, interpret, and apply these facts into useful and interesting knowledge. Through face-to-face interactions, teachers can help students build self-esteem and confidence and emotional maturity.

Con#2: Not all students have access to technology. Depending on their socioeconomic status and living environment, some students may not have access to reliable Wi-Fi or be able to afford dependable devices. These disparities can affect online learning activities, online assignments, and access to online help.

Solution #2 Pros and Cons:

Pro #1: Each student gets a “learning plan” based on how they learn, what they know, and what their skills and interests are. It’s the opposite of the “one size fits all” approach used in most schools. Self-pacing means that students who learn at a faster pace don’t become bored while waiting for their classmates to catch up, they can simply move on to the next lesson.

Pro #2: The self-pacing allows non-traditional students with more demands on their time to work in non-traditional settings. Smartphones and WIFI mean that they can access learning materials from home, on breaks at work or while on public transport. In addition, students with disabilities can use adaptive technology to get the most from the study materials and to communicate effectively with their teachers and classmates.

Con #1: Personalized learning has a lot of potential, but it also has some risks. Teachers might not have enough inclusion training to make this approach accessible to all students. They might not know how to support students who aren’t adept and managing their own schedules and being conscientious. They also might not know how to track competencies or analyze other kinds of student data.

Con #2: Individualized instruction often requires a great deal of preparation up front. If the school isn’t using an intelligent adaptive learning system that collects student data to achieve personalized learning outcomes, teachers will need to thoroughly research the academic history of each student and the ways he or she learns best. In addition, time and resources may have to be put into staff training and development as educators change their approach to teaching.