**Initial Coding of focus group transcript: L1 students**

**Moderator (Öykü):**

**This education model is designed for university students to provide educational support to learners aged 10 to 18. Through this focus group, we aim to gather insights on how to improve the peer-to-peer (P2P) education model. The platform doesn’t exist yet, but we’ll be discussing what it should look like if developed.**

**The goal of the P2P model is to address issues in traditional education, such as passive learning, lack of individualized support, and unequal access. University students will not only teach but also share their personal experiences with younger learners. In this way, students will become both learners and educators.**

**An interactive environment, as well as the development of self-confidence and social skills, are key components of this model. The educational support could be offered either for a fee or on a volunteer basis. However, students from low-income backgrounds will have access to free lessons.**

**The vision of this model is to strengthen knowledge sharing and make education more accessible and inspiring. If the platform expands, the goal is to build an international community.**

**Let’s now move on to the questions. Please feel free to ask if anything is unclear.**

**Q1. How does the peer-to-peer education model differ from traditional teaching methods for you? In which areas do you find it more effective?**

**Moderator (Öykü):**

You've already experienced this model to some extent. In the earthquake solidarity project, some of the instructors were actually university students or recent graduates—not formally trained teachers. So, you can reflect on the education you received from them.

**Rüveyda:**  
One of the most important things for me when I joined these sessions was **how much it boosted my self-confidence** {Boosted Self-Confidence}. I started speaking better, expressing myself more clearly, and improving my social skills {Boosted Self-Confidence}.  
Secondly, the efficiency was noticeably higher. **Smaller group sizes and the comfort of being able to ask questions freely** {Interactive & Efficient Learning Environment}{Improved Communication} made learning much more effective.  
**Having similar ages and thought patterns** {Age Proximity Advantage} also made it easier to understand the material.

**Başak:**  
I think peer-supported education is generally very effective.  
**The age gap with the tutors is smaller** {Age Proximity Advantage} so they feel more like friends than teachers.  
We’re able to **express our thoughts more openly** {Improved Communication}.  
It’s great in terms of both **socializing and communication** {Motivation & Engagement}.

**Ender:**  
Peer education is significantly different from traditional teaching methods, and this difference is a positive one for students.  
Since **the age gap between the teacher and student is small** {Age Proximity Advantage}, it’s easier to **express ourselves and discover our own voice** {Improved Communication}.  
When working in small groups, **lessons become more interactive and enjoyable** {Interactive & Efficient Learning Environment, Motivation & Engagement}.  
Sometimes the lesson drifts off-topic, but that actually makes it flow more naturally.

**Yağmur:**  
Peer education is great because **there’s less of an age difference** {Age Proximity Advantage}.  
Compared to school, **the group sizes are smaller here** {Interactive & Efficient Learning Environment}.  
That means we can **participate more, ask more questions, and interact more actively** {Improved Communication}{Interactive & Efficient Learning Environment}.  
I find myself **engaging better and understanding more** {Interactive & Efficient Learning Environment, Motivation & Engagement}.  
When I ask something I don’t understand, **the tutor responds right away** {Improved Communication}.

**Azra:**  
I feel **more confident answering questions in these lessons because there are fewer people** {Boosted Self-Confidence}.  
At school, the large number of students makes it uncomfortable and reduces interaction.  
This process **helped build my self-confidence** {Boosted Self-Confidence}.

**Rüveyda (additional point):**  
I have a chemistry teacher at school who’s very knowledgeable, but maybe because of age or other reasons, he struggles to communicate that knowledge to us.  
As students, we need that information, but sometimes teachers just can’t connect with us.  
In peer education, this issue is less common.  
When we ask our peers, we’re able to **grasp difficult concepts more effectively** {Interactive & Efficient Learning Environment}{Improved Communication}.  
That’s why I think this type of education is more efficient.

**Q2. What were the biggest challenges you faced when receiving peer support through a digital platform? Did you experience communication barriers, lack of motivation, or technical issues?**

**Moderator (Öykü):**  
What did you find most challenging? It could be communication issues, lack of motivation, or technical problems—after all, you’re learning online.

**Azra:**  
We need the internet to take classes on a digital platform.  
If there’s a power outage or **no internet connection** {Online Learning Barriers}, I can’t join the lesson.  
Sometimes when the video doesn’t load, **I can’t see the person properly** {Online Learning Barriers}, and that disrupts communication.  
When there are sound issues, **understanding each other becomes difficult** {Online Learning Barriers} too.

**Ender:**  
Yes, **technical problems** {Online Learning Barriers} are definitely a major issue.  
Especially when joining from different environments, it’s easy to **get distracted** {Digital Engagement Challenges}.  
If we were in the same physical space, everyone could observe one another, but **online classes lack that element** {Lack of Emotional Connection}.

**Rüveyda:**  
I don’t think **seeing people through a screen is enough** {Lack of Emotional Connection}. To truly understand someone, face-to-face interaction is important.  
**Online lessons reduce emotional connection** {Lack of Emotional Connection} and can lower motivation.  
Learning through a screen sometimes **feels cold and disconnected** {Lack of Emotional Connection}.

**Başak:**  
I think the biggest issue is **scheduling conflicts** {Scheduling Conflicts}.  
Even if the lesson time works for me, it might not be suitable for someone else.  
This becomes a big problem in group sessions.  
Although it's also a challenge in traditional education, it’s worse in online platforms, especially when people are in different time zones.

**Discussion between Rüveyda & Başak:**

**Rüveyda:**  
**Agreeing on a common time is important** {Scheduling Conflicts} because we’re learning as a group.

**Başak:**  
But in school, we’re required to attend classes at set times. At home, online classes are **more flexible** {Flexible, Personalized Learning}.

**Moderator (Öykü):**  
You both make valid points from different perspectives.  
Başak, at school you’re less affected by external distractions, but at home, online learning is more influenced by your surroundings.  
Rüveyda, on the other hand, points out the difficulty of coordinating time in group lessons.

**Yağmur:**  
Since it’s not face-to-face, **you can’t really see my feelings or thoughts** {Lack of Emotional Connection}.  
I might say, “I understand,” but maybe I actually don’t.  
Also, when I’m given a chance to speak, **there’s a delay until I unmute, and that wastes time** {Digital Engagement Challenges}.  
This **leads to a lack of motivation** {Digital Engagement Challenges}.

**Moderator (Öykü):**  
Thank you. Let’s move on to the third question.

**Q3. How would you prefer to interact with university students (tutors) providing educational support? Would you prefer a formal, mentorship-oriented, inspirational, or friendly approach?**

**Başak:**  
I think a **mentorship-oriented and friendly approach** {Friendly & Balanced Tutor Interaction} would be better.  
University students have recently been through what we’re experiencing now.  
They can explain not just how we should study, but also how we shouldn’t.

**Ender:**  
I agree, and I’d like to add a bit more.  
There **shouldn’t be a strict hierarchy between teacher and student** {Friendly & Balanced Tutor Interaction}.  
Of course, we should respect the tutor, but it shouldn’t be as formal as with schoolteachers.

**Moderator (Öykü):**  
Yes, respect is always important. But you’re saying the relationship shouldn’t be overly hierarchical.  
Finding the right balance is key.

**Yağmur:**  
I think a **friendly approach** {Friendly & Balanced Tutor Interaction} would be better.

**Moderator (Öykü):**  
So you’d prefer tutors to be more informal and approachable?

**Yağmur:**  
Yes.

**Azra:**  
I also think a **friendly approach** {Friendly & Balanced Tutor Interaction} would be better.

**Moderator (Öykü):**  
Is there a specific reason why?

**Azra:**  
Not really—just that it feels more comfortable.

**Participant:**  
Could you elaborate a bit more on what a mentorship-oriented approach means?

**Moderator (Öykü):**  
You can think of it as more of a mentorship role.  
Tutors don’t just teach; they guide you regarding school and career decisions—like a school guidance counselor.

**Participant:**  
I don’t think it should be too formal or too casual.  
What’s important to me is finding the right balance, so I’d **prefer a mentorship-oriented approach** {Friendly & Balanced Tutor Interaction}.

**Moderator (Öykü):**  
So you’d like a balanced communication style, drawing a bit from each approach?

**Participant:**  
Exactly.

**Moderator (Öykü):**  
Alright, thank you.

**Q4. What features do you think a peer-supported digital learning platform should have to be most effective? Would one-on-one or group lessons be more useful? What other features—such as motivational talks or mentorship—would enhance the platform?**

**Başak:**  
I think it would be really helpful if a university graduate could share their experiences with us.  
**They could talk about both the positive and negative aspects of university life, the choices they made, and the outcomes of those choices** {Social Dimension}.  
The platform should offer both one-on-one and group lessons.  
Group lessons create a sense of competition and motivation among students, which is a good thing.  
But in group settings, each student gets limited time—for example, you might only have 8 minutes to understand a question.  
In one-on-one lessons, there’s **more flexibility and time** {Flexible, Personalized Learning}, so students can ask as many questions as they need.

**Ender:**  
I think **the timing of group lessons should be agreed upon collectively** {Scheduling Conflicts}.  
When a session is canceled, **motivation can drop** {Digital Engagement Challenges}.  
Also, **it’s important to have a space where students can talk to each other without the teacher. That way, they can exchange ideas among themselves** {Social Dimension}.

**Yağmur:**  
**It would be nice if the tutors occasionally gave motivational talks** {Social Dimension}. Students could share their future goals, and the tutors could help guide them. This would give us a chance to explore our own interests and potential paths.

**Rüveyda:**  
I believe university students **taking on mentorship roles** {Friendly & Balanced Tutor Interaction} would be very beneficial.  
I’ve experienced a version of this before, and it was very effective.  
Students should be able to **express themselves freely, without fear of judgment** {Friendly & Balanced Tutor Interaction}{Improved Communication}.  
The platform should include a space that supports this kind of open communication.  
Also, I think **one-on-one lessons** {Flexible, Personalized Learning} would be more effective overall.

**Moderator (Öykü):**  
Some students may not feel comfortable in one-on-one sessions, while others might be more active in group classes.  
And sometimes it’s the opposite. That’s why it’s important to include both options.  
Thank you all for your input!

**Q5. How would you prefer to track your progress on such a platform? What methods would be effective for monitoring progress—mentor feedback, automated analytics, AI-based testing systems, or something else?**

**Ender:**  
I think there should be an **AI-powered system where students can enter their test results**.  
The AI could **analyze the results to identify weak areas and suggest personalized study plans** {Progress Tracking}.

**Moderator (Öykü):**  
So the student takes a test, and the AI reviews the results to highlight their weak spots?

**Ender:**  
Exactly.

**Rüveyda:**  
I agree that having tests is useful, but one test isn’t enough. There should be **multiple tests and regular reviews to track progress** {Progress Tracking}.  
The system should **monitor students’ mistakes and help close those knowledge gaps** {Progress Tracking}.

**Yağmur:**  
It could work like the exams we have at school or in tutoring centers, where the teacher evaluates the results online.  
Then, the teacher could identify the areas where students struggle and provide additional support in those topics.

**Başak:**  
I agree with Ender and Rüveyda. There could be **practice exams, and a question bank created by analyzing the commonly missed questions for review purposes** {Progress Tracking}.

**Participant:**  
I think progress tracking is very important.  
It would be motivating if students could **see how they rank compared to others** {Progress Tracking}.  
For example, if there’s a group of 100 students, the platform could **display rankings** {Progress Tracking}.  
Climbing from 50th to 40th place, or aiming for the top 10, could be a goal.  
If this is managed with AI, **the results would be even more precise** {Progress Tracking}.

**Moderator (Öykü):**  
So the platform could assess students through exams and display their progress comparatively?

**Participant:**  
Yes, but it would be better if the names were anonymized. That would be fairer and more motivating.

**Moderator (Öykü):**  
Agreed—the goal is to help students improve through mutual development.  
A system like this could create a healthy sense of competition and boost motivation.  
Now let’s move on to the sixth question.

**Q6. How does digital peer-supported education affect your learning speed and quality? Some of you have already mentioned that it boosts your confidence, but let’s explore how it affects the quality of your learning.**

**Ender:**  
It doesn’t have a major effect on my learning speed.  
However, it has had a **very positive impact on the quality and ease of my learning** {Interactive & Efficient Learning Environment}.  
I haven’t noticed a change in my self-confidence, because I don’t think I’ve ever had an issue with it.

**Moderator (Öykü):**  
What would have helped increase your confidence?

**Ender:**  
I think that’s a personal factor—I just don’t have a problem with confidence.

**Moderator (Öykü):**  
Fair enough, that’s a good answer.

**Rüveyda:**  
I believe learning speed, quality, and confidence are interconnected.  
When one improves, it positively affects the others.  
As our learning quality increases, our speed can improve as well.  
Even though confidence is somewhat separate, this model also **helps build it** {Boosted Self-Confidence}.

**Başak:**  
For me, learning speed definitely improved.  
In 9th grade, I had **one-on-one lessons** {Flexible, Personalized Learning}.  
Because of the **direct communication with the tutor** {Improved Communication}, I could **correct my mistakes right away** {Interactive & Efficient Learning Environment}.  
**My confidence also grew** {Boosted Self-Confidence} because my mic was always on, and I felt **free to speak comfortably** {Boosted Self-Confidence}{Improved Communication}.

**Moderator (Öykü):**  
Would you feel the same in a group lesson?

**Başak:**  
I think that depends on the person, but yes, I’d feel the same.

**Yağmur:**  
**My confidence increased too** {Boosted Self-Confidence}.  
The **tutor’s warm and friendly attitude** {Friendly & Balanced Tutor Interaction}.

**Moderator (Öykü):**  
Great, thank you. Now let’s move on to the seventh question.

**Q7. What do you think is the biggest advantage and disadvantage of this system? Considering that university students would be your tutors, what would be the pros and cons?**

**Ender:**  
Advantage: **The small age gap between teacher and student is a huge plus** {Age Proximity Advantage}.  
Disadvantage: In group lessons, **the scheduling can be inconsistent** {Scheduling Conflicts}.  
Also, because it's online, **there can be connection issues** {Online Learning Barriers}.

**Başak:**  
Advantage: Easy and quick access to tutors.  
If I have a question, I can get an immediate response. Also, **the smaller age gap makes communication more comfortable** {Age Proximity Advantage}.  
Disadvantage: Time limitations.  
A lesson may last 40 minutes, but **poor time management** {Digital Engagement Challenges} can make it less effective.  
**Calling on students and technical issues** {Online Learning Barriers} can eat into the lesson time.

**Rüveyda:**  
Advantage: The system provides a **more personalized approach** {Flexible, Personalized Learning}.  
Since students are better understood, tailored guidance can be offered. It also creates a **more relaxed and sincere atmosphere** {Friendly & Balanced Tutor Interaction}, which is beneficial.  
Disadvantage: **Being online can reduce motivation** {Digital Engagement Challenges}.  
**Not seeing people face-to-face weakens the sense of connection** {Lack of Emotional Connection}.

**Yağmur:**  
Advantage: **The friendly approach of tutors** {Friendly & Balanced Tutor Interaction} can lead to better academic results.  
Disadvantage: If a student’s camera is off, **it’s easier to get distracted** {Digital Engagement Challenges}.  
They might end up **doing other things in the background** {Digital Engagement Challenges} during class.

**Moderator (Öykü):**  
Do you have any suggestions to overcome these disadvantages?  
Specifically regarding technical issues, time management, and maintaining motivation in an online setting?

**Moderator (Öykü):**  
Alright, I guess not. Let’s move on to the eighth and final question.

**Q8. If this model becomes widespread in the future, how do you think it would transform the education system? If thousands of students in Turkey and around the world start using it, how would traditional education change?**

**Ender:**  
I think if this system becomes widespread, **the demand for private tutoring centers would decrease** {Transformation of Traditional Education}.  
If it goes global, **students could develop more international connections** {Global Interaction Opportunities}.  
But there’s also a downside—traditional education has some advantages.  
In face-to-face learning, teachers can observe whether students truly understand the material.  
Also, when students are physically present in a classroom, attending lessons becomes more of an obligation.  
In online classes, that sense of obligation decreases, and students might come up with excuses to skip.  
We saw this during the COVID-19 period—many students didn’t attend live online lessons.

**Moderator (Öykü):**  
But there’s a difference here. In this system, the education would be either paid or volunteer-based.  
When a service is purchased, the student’s attitude might change.  
Also, students who are motivated to learn could receive support from volunteer tutors.  
Do you think that makes a difference?

**Ender:**  
Possibly. Parents might also play a significant role here.  
Even if the student isn’t interested, their parents might still want them to participate.  
That could cause resistance or lack of motivation in the student.

**Rüveyda:**  
I think the biggest change this model would bring is **reducing the influence of compulsory education** {Transformation of Traditional Education}.  
Right now, education is mandatory for 12 years, but this system could **make learning more voluntary** {Transformation of Traditional Education}.  
And when we do something by choice, the outcomes are usually more positive.  
That said, there’s still a risk of losing motivation or making excuses with this system too.

**Moderator (Öykü):**  
That’s a very important point.  
But just as remote education has its downsides, it also has advantages.  
For instance, students from different cities or countries can come together.  
The platform could also organize occasional in-person events so students can meet face-to-face.  
Also, we may have developed biases against online education due to negative experiences during COVID.  
Those past experiences might be shaping our current perceptions.

**Yağmur:**  
I think it would be better if **this system becomes more widespread in the future** {Transformation of Traditional Education}.  
We’d get to **meet people from different cities and countries** {Global Interaction Opportunities}.  
That would create a **much broader space for interaction** {Global Interaction Opportunities}.

**Moderator (Öykü):**  
Yes, this system has both strengths and weaknesses, but it has potential to evolve.  
Thank you all for your participation.