**Qualitative Data Analysis – 2 Interviews**

**Data Familiarization**

The interviewees are two international students from Malaysia and Cambodia, currently studying at the University of Melbourne, Australia. The first interviewee completed a Bachelor of Science majoring in Biotechnology, followed by Honors and a Doctoral degree at the university. The second interviewee pursued a Bachelor of Science in Mechanical Engineering at the Purdue University, USA, followed by a Master of Information Technology with a specialization in Computing. The interviews were conducted to explore their practical and social experiences, challenges faced and the use of technology throughout their academic journey.

**Initial Codes Generation**

A careful analysis was conducted and identified the following key practical and social challenges implicitly highlighted by the interviewees.

Practical Challenges:

1. Language and accent comprehensions such as slang, local idioms, speech pace (Australian and American English)
2. Adapting to a new academic structure and style (course structure, assessment style)
3. Adaptation of different learning environments (hybrid vs traditional)
4. Soft skills gap (presentation skills, academic communication)

Social Challenges:

1. Cultural adaptation fatigue where participant needs to relearn social norms (from home country -> American culture -> Australian culture)
2. Social integration and Interaction with domestic students
3. Difficulty integrating into local social activities and peer groups that involved with clubbing and alcohol consumptions
4. Struggles to locate suitable student clubs aligned with personal interest
5. General anxiety and stress from adapting to new culture or repeated adjustments

**Thematic Synthesis**

Theme 1: Repeated Cultural and Linguistic Adaptation

* Both interviewees express exhaustion and repeatedly adapting to new accents, slang and linguistic nuances
* Second interviewee experienced double adaptation from American culture followed by the Australian one. This exacerbates frustration and fatigue.
* ***“It took me years to adapt to American culture… Now I have another round of adaptation which is super tiring”***
* ***“The biggest struggle was adapting to the accent and local terms”***

Theme 2: Academic Adjustment Stress

* Second interviewee explicitly struggled with differences in teaching methodologies, assessment criteria and overall course structure between American and Australian universities. Adjusting to diverse assessment methods are challenging especially in graduate level. Continuously adapting to completely different educational systems is cognitively strain.
* First interviewee initially struggled with hybrid teaching formats, lecture comprehensions and public speaking or academic presentation demands
* ***“American universities have different course structures… here in Australia it’s completely different... now I must get used to it again.”***
* ***“I wish I had known lectures were recorded… I struggled to keep pace with live lectures.”***

Theme 3: Technological Needs and Preferences

* Both expressed clear potential for technology support such as live captioning tools, intuitive learning platforms, club recommendation and matching applications
* Emphasis on ease of use and straightforward access
* ***“Live transcriptions could help understand lectures”***
* ***“Club-finding platform aligning students’ interests could significantly ease social integration.”***

Theme 4: Social Integration and Finding Community

* Both interviewees faced difficulties integrating socially, with second interview highlighted frustration in finding clubs matching personal interests
* First participant found it hard to initially engage with local social norms (alcohol consumption and clubbing social cultures)

**Recommendations for Technological Innovations**

By combining insights, themes and analysis from both interviews, it clearly reveals that the project needs a strong technological intervention that provide targeted support for repeated linguistic, social and academic adaptations. Furthermore, it is crucial to build technology that reduces cognitive load and guides internation students through structured onboarding into new cultural and educational environments.

Integrated Live Captioning and Lecture Transcription Service

* Supports both linguistic adaption and personalized pacing of lecture content
* Highly beneficial for Alix, equally helpful to Josh during initial adaptation

Academic Adaptation Platform (Interactive Guide/Orientation Tool)

* Clarifies academic expectations, structures, and assessment criteria in Australian universities
* Specifically beneficial for Josh, who needs clarity transitioning from American academic standards

Social and Cultural Adaptation Community Platform

* Enables students to adapt with culturally comfortable and interest-based communities or clubs
* Uses intelligent matching algorithms based on interests, social preferences and cultural comfort levels.
* Offers clear comparison guidance between different university systems, learning styles and supporting smoother academic integrations with real feedbacks contributed by students with the same background.
* Directly addresses Josh’s frustrations finding suitable clubs, indirectly supports Alix’s social integration struggles. A smart recommendation algorithms and interest-based student club matchmaking to reduce fatigue in exploring campus events.

Interactive Soft Skills Development Hub

* Interactive practice modules for presentation, communication and networking such that an app that can give feedback on your presentation and ideas articulation skills
* Valuable to Alix directly, and beneficial for Josh’s future professional development

**Persona Analysis**

Persona 1: Alix (Doctoral Student from Malaysia)

Background

* Bachelor of Science, PhD in Cancer Biology
* Malaysian, completed full study at University of Melbourne

Goals:

* Develop strong research skills, successful academic integration

Frustrations and Pain Points:

* Struggles with Australian accent comprehension initially
* Felt pressured into culturally uncomfortable social activities such as pub and clubbing cultures
* Initial weakness in soft skills like public speaking and academic presentations

Motivation and Preferences:

* Strongly values recorded lectures (self-paced learning)
* Prefers user-friendly, simple technology solutions
* Values personalized academic and language solutions such as TED talks and captioning

Persona 2: Josh (Former Purdue University Student, Currently Master of IT at UniMelb)

Background

* Completed bachelor of science studies at Purdue University, USA
* Currently pursuing a Master of Information Technology at UniMelb
* Has adapted once to US culture, now needs to adapt again to the Australian Culture

Goals

* Successfully manage rigorous technical master’s degree studies
* Find meaningful community engagement like student clubs aligned with interests
* Smoothly transition and adapt to the new academic environment and culture

Frustrations and Pain Points:

* Significant fatigue from repeated cultural and linguistic adaptations
* Exhaustion due to differences between American and Australian academic structures
* Struggles finding appropriate clubs aligning with personal interests

Motivation & Preferences

* Needs a solution that can streamline cultural and academic adaptation
* Strong interest in technologies that simplify finding social groups aligned to personal interests
* Prefers technologies that clearly explain academic expectations and structures in Australian context