**TABLE 1**

**Emerging themes and subthemes from interview data.**

| Themes | Subthemes |
|---|---|
| Challenges experienced by students in remote learning | • Distractions at home<br>• Technical issues<br>• Lack of communication with others<br>• Lower motivation |
| Student adaptations to remote learning | • Creating a new routine<br>• Adapting to new study environments<br>• Understanding and learning more about technology<br>• Having a positive mindset/thinking about the big picture<br>• Adjusting learning strategies and using more resources |
| Recommendations from students to improve remote learning | • Instructor: teaching, communication, social-emotional support<br>• University: resources and communication<br>• Family: understanding and support |

**TABLE 2**

**Instructor reflections and pedagogical strategies implemented in subsequent semesters in response to the interview data.**

| Themes | Subthemes | Instructor reflections and actions taken |
|---|---|---|
| Challenges experienced by students in remote learning | Distractions at home | • Provided information about infrastructure with quiet spaces and stable internet and device loaner programs for electronic devices from the universities |
| | Technical issues | |
| | Lack of communication with others | • Created and monitored collaborative chemistry problems/tasks via Google Jamboards or discussion threads via learning management systems<br>• Created group chats in apps such as GroupMe or Remind to send reminders of important deadlines of assignments or tasks |
| | Lower motivation | • Sent personalized early-alert motivational messages to all students during semesters via a tool named Canvas Insights<br>• Used frequency formative assessments and employed more interactive tech tools such as the Pear Deck program or Kahoot game to increase engagement and feature exemplary student responses to improve motivation<br>• Incorporated a real-world application group project based on student interest to increase student perceived task value, motivation, and peer-to-peer communication skills |
| Student adaptations to remote learning | Creating a new routine | • Helped students establish a weekly calendar |
| | Adapting to new study environments | • Shared instructors' personal stories and used icebreakers to connect with students |
| | Understanding and learning more about technology | • Provided handout and gave brief instruction on tech tools during lectures<br>• Provided information about virtual IT training/tech support for students from universities |
| | Having a positive mindset and thinking about the big picture | • Integrated an online module to teach growth mindset |
| | Adjusting learning strategies and using more resources | • Integrated an online module to teach effective learning strategies |