Background & Literature Review
The Coronavirus disease 2019 (COVID-19) unexpected outbreak resulted in a rapid migration of face-to-face in-class teaching and learning to online and distance educational methods internationally. This change created challenges on preservice teachers’ ICT technology application skills, media literacy skills, information skills (Eickelmann & Gerick, 2020; Hartshorn et al., 2021), and mental health (Roman, 2020).

Research Purpose & Hypothesis
Although students in Taiwan remained in face-to-face in-classroom learning mode, they however also prepared to move the class to the Internet and learned how to teach on the Internet. Therefore, this study aimed to investigate the relationship among preservice teachers’ technology efficacy, resilience, and stress. Following hypothesis were tested:

- H1: Technology for academic learning is associated with course design.
- H2: Technology for internet searching is associated with course design.
- H3: Resilience is associated with academic learning and course design.
- H4: Academic stress is associated with internet searching and course design.

Methods
Participants
- A purposive sampling method was used for participant recruitment. Students were recruited from universities that provide teacher education programs through contacting teachers who were teaching in the programs. All participants (N=113) received 50NT 7-11 gift card (about 1.5 U.S. dollars).

Instruments (details see Table 1 & 2):
- The preservice teachers’ Inventory of Technology Efficacy (ITE)
- The preservice teachers’ Inventory of Technology use efficacy for Course Design (ITE-CD)
- The preservice teachers’ Inventory of Resilience (IoR) – Problem solving section
- The preservice teachers’ Inventory of Academic Stress (AS) – Concerns for future section

Research design and procedures:
- All data were collected through SurveyCake
- Resampling with the bootstrap by 1000 with the upper and lower bounds for the confidence interval at 95%.

Results
1. The path model for the low-tech use for course design
   \[ \chi^2 (N = 113, df = 1) = .282, p = .595, GFI = .999, AGFI = .985, RMR = .006, SRMR = .0128, RMSEA = .000, NFI = .997, RFI = .974, IFI = 1, CFI = 1. \] The results indicated this is a good model.

2. The path model for the adv-tech use for interactive course design
   \[ \chi^2 (N = 113, df = 1) = .282, p = .595, GFI = .999, AGFI = .985, RMR = .006, SRMR = .0128, RMSEA = .000, NFI = .997, RFI = .971, IFI = 1, CFI = 1. \] The results indicated this is a good model.

3. Indirect relationships (see Table 3)
   - There is a statistically significant indirect effect of technology efficacy for academic learning on resilience of problem solving.
   - There is a statistically significant indirect effect of future stress on advanced technology use for interactive course design.

Table 3
The significant of indirect effects for the model.

<table>
<thead>
<tr>
<th>Factors relations</th>
<th>Lower bonds</th>
<th>Upper bounds</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adv-tech use for interactive course design → Academic Learning</td>
<td>.028</td>
<td>.337</td>
<td>.008**</td>
</tr>
<tr>
<td>Adv-tech use for interactive course design → Stress for future</td>
<td>-.246</td>
<td>-.044</td>
<td>.001**</td>
</tr>
</tbody>
</table>

Therefore, we accepted
- H1: Technology for academic learning is associated with course design.
- H2: Technology for internet searching is associated with course design.
- H3: Resilience is associated with academic learning and course design.
- H4: Academic stress is associated with internet searching and course design.

Discussion and Conclusion
1. Online searching, resilience, and adv-tech for course design
   Our findings suggested that:
   - The resilience and online searching played an important role on supporting the use of advanced technology for interactive course design.
   - The challenge of applying advanced technology for teaching is greater than just learning it.
   - The current practice as school does NOT satisfy to the need of using advanced technology for interactive course design.
   - Supported previous study that preservice teachers tent to acquire supports from the internet during the pandemic due to school support is not sufficient (Bower, DeVitt & Lai, 2020).

2. Information, media, and technology skills, stress, and resilience
   Our findings indicated that:
   - The preservice teachers’ information, media, and technology skills are directly associated with resilience and indirectly associated with future stress on their post pandemic career preparation.
   - Supported Eickelmann & Gerick (2020) and Hartshorn et al.’s, (2021) studies on preservice teacher’s ICT skills, media literacy skills, and digital skills are critical for their current learning and the post-pandemic education and career preparation.

3. Preservice teachers have more confidence on use low-tech for course design
   Our findings suggested that:
   - Preservice teachers have more confidence on using low-tech to design lecture course for lower level cognitive domain learning.
   - Supported previous studies that preservice teachers considered the use of Kahoot! as a low-tech use as PowerPoint (Wang, 2015) Licitoh et al., (2018).