Spring 2020
Student Response
to the Online Transition

Kathleen A. Jeffery

Chris F. Bauer

Department of Chemistry
University of New Hampshire

Survey Scope

- **Description of learning environment**
    - Talk about what it means to "go to class" before & after the transition; i.e. how was class time spent?
    - How much time did you invest in support activities (e.g. tutoring, office hours, study groups) before & after the transition?

- **Perception of learning online**
    - Level of engagement with course content?
    - Emotions about learning environment?
    - Motivation to participate?
    - Extent of feeling like a "member of a community of learners"?
    - Shift in course expectations and responsibilities?
    - Gains or losses moving online?
    - Change in approach to studying?

University of
New Hampshire

Student Description of Learning Environment

- How class time was spent did not change significantly
  - 40-80% listening to presentation of information
  - 15-40% watching walk-throughs of example problems
  - Small shift to watching demonstrations, videos, and simulations

- Students spent less time in student-organized study groups, peer-led team learning groups, and review sessions

- Students experienced significant reduction in interpersonal exchanges

	In-Class	Out-of-Class
Before	35	51
After	11	23

University of New Hampshire

Student Response Profiles

Major Characteristics

Okay
- Unfazed and remain motivated
- Focus on benefits of online learning

Keep Calm
- Challenges of online learning are recognized, but adapted to
- Course and external resources are utilized
- Aspects of in-person learning are missed

Structure-seeking
- Struggle with loss of external structures that helped frame how, when, and where to work
- Distractions in environment interfere with learning and studying
- Learning compromised without support to focus and sustain motivation

Loss
- Feelings of sadness and despair
- Learning compromised as focus, motivation, and productivity have been lost
- Normal or familiar means of engaging with the course or people have been lost

Lemons
- Feelings of frustration, anger, or disdain
- Learning compromised and aspects of the course considered poor or pointless

University of New Hampshire

Positive-Leaning Student Voices

Okay

"Increased [engagement] because I can **review lecture recordings at my own pace** and at my own convenience. **Resources are more accessible** at one's fingertips rather than physically walking to where office hours are held or sitting through lecture that may seem slow. **Students can make the most of their time** by studying effectively."

Keep Calm

"I try to engage with the course just as much because this is a prerequisite and I might need the information down the road so I really want to understand the material. … **I don't look forward to coming to class because I know it is being recorded and I could do something else** I'd rather do. … . I have multiple classes in a row **and it is hard to just sit at a computer screen for hours.**"

University of
New Hampshire

Structure-seeking

"It's **hard to actually pay attention and take in the information** I'm writing as I take notes from the posted slide-opposed to actually being in class…. … It's **so easy to procrastinate at home** because we don't have class times and we also don't have to physically go to class. It's **hard to adjust** from say watching a movie to taking chemistry notes. I think that's the hardest thing about this transition. … My motivation has definitely decreased by a lot. **I feel as though I'm a bit lost**…. **When I don't fully understand something, my motivation tends to decrease even more**."

Loss

"Before spring break I wouldn't say I looked forward to coming to class but I knew there would be value in coming. **Now I don't feel as if I'm being taught anything and it's up to me to teach myself** chemistry, which believe me, **isn't going well**. I feel emotionally **tired from stressing out about this** online lab and lecture."

University of
New Hampshire

Lemons

"Lab used to be my favorite part of chemistry and it really helped me understand the material, but **now everything just blends together** and I feel like **I don't understand the material but can't get the help I need**. ... I hate it. I **hate not being able to see other students and collaborate easily**, I **hate not being able to** directly and easily **ask TAs or instructors questions**, and I **hate feeling lost and stupid**."

University of
New Hampshire

Data into Practice

Student Struggles

- Maintaining focus online/screen time
- Loss of peer interaction in & out of class
- Loss of learning resources
- Feelings of hopelessness, loss & isolation
- Distracting home environments
- Time management & establishing routines when class feels optional
- Lack of real-time clarification
- Loss of hands-on involvement & development of professional skills

Practical Strategies

- Break up synchronous class sessions with group practice & question/clarification opportunities
- Promote co-learning through study groups, discussion platforms, or in-class working teams
- Develop & assess team process skills to support successful group dynamics
- Establish a sense of being known by meeting students
- Provide support for establishing learning spaces & routines
- Record classes so students can choose when & how to engage with content (e.g. pause/re-watch)
- Provide clear & organized learning objectives to focus student learning
- Model decision-making in real-time & give students the same opportunity

University of
New Hampshire