Seasonal Adjustment Training, Considerations and Strategies

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Seasonal Adjustment Practitioners Workshop

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Why this topic?

- Unrelated events sparked our thinking more deeply about our training in seasonal adjustment
    - At this year's Joint Statistical Meetings, Jenny Thompson will participate in a panel discussion on training (not specific to seasonal adjustment)
    - Requests for training have increased recently from those with differing roles from our usual target

Plan in place

- Technical class
  - Internal, once a year, in the fall, right before the program areas start to review their seasonal adjustments for the following year
  - For employees new to seasonal adjustment or anyone who wants a refresher
  - Includes computer exercises

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Background on our classes

- Typically we focus on
  - Concepts of seasonal adjustment
  - Use of X-13ARIMA-SEATS, Win X-13, X-13-Graph, and other related software
  - Diagnostics that help in selecting options
- Technical, statistical methods and information
  - New vocabulary for anyone new to the methods
- Usually two of us present the material

Content has varied over time

- We have experimented with
  - Order of topics
  - Presentation time vs. computer exercise time
  - Length of class

- We feel pretty confident with our usual arrangement, although the class keeps getting longer (more information to share)

Tailoring the material

- Most class materials stay consistent
  - Update or add new information (or clarifications)
  - Add/remove some depending on what we know of the practices
  - We (Demetra) often tailors the computer exercises to the class
- We assume familiarity with statistical concepts but keep the material straightforward

Everyone who reviews adjustments needs training

- Possibly true for all statistical methods but especially true for seasonal adjustment

  - Time series classes are uncommon among math and statistics majors

  - Even those who have had time series classes may not have covered seasonal adjustment

  - Even those who covered seasonal adjustment may not know how or why to change from default settings

All reviewers need training, part 2

- We don't have much baseline documentation, so the classroom is where we impart that information
- We do recognize that some learn differently from others, classroom setting might not be ideal
  - Demetra is working on a tutorial
  - We have papers for new users (expand those?)

Different roles

- Recently we have more role diversity in our classes, not just statisticians but economists and others as well

- We have to recognize that difference and celebrate it

  - Some review the diagnostics and make decisions or recommend changes

  - Some must hear and understand what the reviewers describe

  - All must speak the same (statistical) language

Within the classes, conversations over lectures

- Classes work best when the participants
  - Ask questions
  - Give opinions and feedback
  - Share examples
- It can be hard to get all participants to participate!

How can we engage the participants?

- Classes have varied personalities
  - If only one person speaks up, it can be helpful or disruptive, depending on how the others view the situation
  - If at least two engage in discussions it saves the class
  - If even one is disruptive or disrespectful it can sink the class

How do we keep materials up to date?

- Usually a simple update affects just one section of the class, but we need to consider the full course
  - Multiple sections might allude to the piece that needs updating
  - Sometimes attempts at clarifying turn into overkill
- I take notes during our classes of sections that need newer information or better flow – but usually I cannot take notes while presenting

How do we best make use of the time we devote to training?

- Instructors' time before, during, and after
  - Before: update or create materials
  - Before: review and prepare what to say
  - During
  - After: answer questions
- Participants' time during and after
  - Before: read background material (sometimes)
  - During
  - After: put new information into practice

Time solutions needed

- People who want to take the class may not be available at the time we can offer the class (or are new hires who arrive after we have given the class)
  - Current solution is time intensive – a staff member sits down with those who need the training and goes through the course materials (usually only one or two trainees)

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Changes we hope to make

- Rework our less-technical class and offer it regularly
- Give regular briefings or updates on new research findings and best practices
  - We update class materials, but for experienced reviewers, taking the class again is a big time commitment when they need just the new parts
- When needed for external classes, translate computer exercise worksheets into other languages ahead of time
- Creatively offer training outside of a classroom

What are your success stories with online training?

- Online training would resolve some problems/introduce others
  - Solves timing issues in particular
  - Helps those who want to revisit only a few select topics
  - Some people greatly prefer online training to in-person training
- We had some brief in-house attempts to create online training (based on course slides)
- Success will depend greatly on the format and approach

Less classroom (but not none)?

- Some have suggested shooting video of the course as we present it
- Current technology might allow for remote access to the course

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We welcome recommendations

- Do you have training strategies that work?
- Please let us know!

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Thank you!