Getting Started with GIS for Educators

Geographic Information Systems (GIS) technology allows users to make maps and analyze data. Savvy educators have been using GIS since the early 1990s, but online GIS makes it easy for educators to get started quickly, even just learning on their own, online. Here is a sequenced set of resources and activities with which to begin. They start fast and easy, scaffold ideas and skills, and generally take more time and require more background as one progresses, so items should be experienced in order.

I. Learning About GIS & ArcGIS Online (takes about an hour to complete)

1. LINK - What Is GIS (1-min video)
2. LINK - GIS and Schools (2-min video)
3. LINK - GIS in Ed Intro (quick PDF slideshow)
4. LINK - Learn About Esri (webpage plus video)
5. LINK - Esri Schools Program (with links to videos, articles, instructional materials, and software)
6. LINK - AGO5x5 (activity instructions; do at least parts 1-3 of "New" or "Classic" version)
7. LINK - AGO Skillbuilder (activity; do Level One, steps 1-17)

II. Intro to Teaching with ArcGIS Online (takes about a day to complete)

8. LINK - GeoInquiries™ intro storymap (includes 6-min demo video)
9. LINK - GeoInquiries classroom activities (explore several of the 10 collections, ~30 min)
10. LINK - Mapping Hour instructional videos (see at least #1-3 in set of 20 for teachers and parents)
11. LINK - Get to Know GIS for Secondary Students (5-activity Learning Plan)
12. LINK - AGO Use Strategies (2-page reference doc for teaching with AGO)
13. LINK - AGO Orgs for Schools (36-page Org setup guidance and reference doc)
14. LINK - Request an ArcGIS School Bundle for the school/club
15. LINK - Getting to Know GIS for CTE (StoryMap for Career & Tech Ed)

III. Boosting ArcGIS Online Background & Skills Useful for Instruction (takes weeks)

16. LINK - USK12GIS Map (software sites; numbers up top lead to example work by students and educators)
17. LINK - ArcGIS Online Competition for US HS+MS Students (see independent student creations)
18. LINK - ArcGIS StoryMaps Resources (new builder with many helping guides)
19. LINK - Teaching with Living Atlas training course ("esri login" to maintained product required (Bundle ok))
20. LINK - K12 GIS Org (try buttons 01-09: resources, lessons, maps & apps, movies, etc)
21. LINK - Teach with GIS (scenario-based activities, on the "Learn ArcGIS" site; use filters & search tool)

IV. Professional Development options (after "Level I" above, engage for lifelong learning)

22. LINK - Esri Community Groups (read-only or, with "esri login," set a profile, "subscribe" to zones)
23. LINK - Explore and consider joining the "Teachers Teaching Teachers GIS" (aka "T3G") cadre
24. LINK - Participate in Esri Education GIS Conference (see also Esri User Conference)
25. LINK - Do Developing Project Based Instructional Units Utilizing ArcGIS Online