Review of *Community Geography: GIS in Action (Teacher’s Guide)*


(clickable PDF links to individual reviews)


II. Li, Yinghui. Community Geography: GIS in Action (Student Text) and Community Geography: GIS in Action (Teacher’s Guide).

Review by Anthony Howser, San Diego State University

Malone, Lyn, et al.
133 pages.
2003.

Synopsis:
Comprehensive teachers manual to accompany text in supporting the planning, introduction, exercises, and assessment of introductory GIS educational modules for the Grades 7~12 learning audience. Lessons are taught with provided data with the requirement of an onsite installation of ArcView.

Application to the NSF-ATE Project:
*Offers well-developed and comprehensive learning modules directly relevant to our project.
*One area of concern is that our current options for software tools (ArcExplorer, ArcVoyager, and ArcIMS) do not have all of the functionality that is required in these lessons. Specific functions that would require a full-blown desktop GIS include running scripts, address-based Geocoding, Zoom to Previous Extent, Set Scale Dependency, Full Theme Properties Dialog, and certain attribute table operations such as Sort Records, Summarize an Attribute Field, Promote Selected Records, Edit Attribute Table, etc.. Other than that, much of the other functionality can be duplicated or substituted in the lessons. It may be more useful for the higher level students to get experience with a full-blown GIS such as ArcMap/ArcView.
*The mapping of “lessons learned” to National Geography Standards and National Science and Technology Standards may be a good guide to how we may document standards that are addressed in our own learning modules.
*The format of the teacher manual is VERY comprehensive from lesson introduction, teaching exercises, grade level-based learning assessment, and further exploration to teachers who would like to add their own elements to the lessons.
*Again, because of the utilization of ArcView in the lesson, depending on the software application utilized in our project, lessons will need to be edited slightly to be taught or thrown out entirely because of missing functionality in our own delivery mechanisms.

Comments:
*I believe that, for a teacher to successfully teach with this tool, they will need a solid foundation in GIS. If the teacher is uncomfortable or unfamiliar with the technology, then it would be difficult to teach with these tools. Significant foundation and support/guidance may have to be provided to teachers without the requisite background.

*The problem-based modules are engaging but may not interest the younger students as much as the advanced high school students.

*The issue of requiring the full functionality of ArcView with these learning modules is of concern.

*The book may be very useful in the creation of our learning modules.

*Please note that these reviews do not necessarily represent the consensus views of the overall research team
Community Geography: GIS in Action (Student Text) and Community Geography: GIS in Action (Teacher’s Guide).

Review by Yinghui Li, San Diego State University

Community Geography – GIS in Action
Kim Zanelli English, Laura S. Feaster
2003
US$24.95

Community Geography – GIS in Action, Teacher’s Guide
Lyn Malone, Anita M. Palmer, Christine L. Voigt
2003
US$9.95

Synopsis:
Community Geography – GIS in Action
This book is designed for helping middle and high school students in investigating local areas using GIS technology to effect changes. The real stories in this book encourage students to seek out and study some issues and problems in student’s own communities. Each study module in this book contains a case study, a hands-on GIS exercise, and an exercise for self-study that can be customized to users' own communities.

What’s in the CD?
This CD includes ArcView 3.x projects and data for the exercises.

Synopsis:
Community Geography – GIS in Action, Teacher’s Guide
This book is designed for teachers who want to use “Community Geography: GIS In Action” for their students, this guide provides teachers with all the resources they'll need to complete the GIS exercises and self-guided projects with middle school and high school students. These resources include lesson plans, National Geography Standards, assessments for middle or high school students, evaluation rubrics, and teacher tips on completing self-study GIS projects.

The structure in “Community Geography, Teacher’s Guide” is very similar to the book – “Mapping Our World” because the authors are the same for both books. Both of the two books have lesson plans, National Geography Standards, assessments for middle or high school students, and teacher’s notes/tips. “Mapping Our World” can be described as a combination of “Community Geography – GIS in Action” and “Community Geography – GIS in Action, Teacher’s Guide”.

What is useful for the NSF-ATE project?
The step-by-step exercises in the book “Community Geography – GIS in Action” are the best instructions I have ever seen. They are clear, colorful, and easy to follow. Most of instructions come with screen shots which provide visual references to the software. I think this is a great reference book for designing our learning modules.

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