

Appendix B

Resources for Pop-up Making Learners and Teachers

This list of resources is far from comprehensive, but includes the most useful found for the beginner in this field. Resources for the teacher have also been included, including those that discuss how to include professional pop-ups (or other movable books) into classroom activities, and those that list suggestions for professional pop-ups to include.

B.1 Instruction Books

This section lists a few of the most useful instruction books available for paper engineering. For books that include patterns to cut out and assemble, see Section B.2

- Duncan Birmingham, *Pop Up!: A Manual of Paper Mechanisms*, ISBN: 1-899618-09-0

This is the most useful instruction book available for learning the basic elements and their geometric constraints. (It was the most used book in the construction of Popup Workshop.) Marvelous detail on variations of v-folds is included, for instance. It also includes such devices as wheels and pull-tabs. The illustrations are simple line drawings.

- David A. Carter and James Diaz, *The Elements of Pop-Up: A Pop-Up Book for Aspiring Paper Engineers*, ISBN: 0-689822-24-3

This is a book for those who like their illustrations in 3D. Actual working models of elements and clear indications of constraints are provided, including pull-tabs, wheels,

and transformations. It doesn't contain the variations you can find in Birmingham above, but it is useful to see them actually work.

- Paul Jackson and Paul Forrester, *The Pop-Up Book : Step-By-Step Instructions for Creating over 100 Original Paper Projects*, ISBN: 0-805028-84-6

This book contains basic directions for both 90° and 180° elements. The best part of this book is the wealth of illustrations of variations on each element, the design section in which valentines are designed using each of the elements, and a gallery of various cards.

- Barbara Valenta, *Pop-O-Mania*, ISBN: 0-803719-47-7

A perfect book for the young (6-10) beginning paper engineer. Only a few elements are featured, beaks and steps and a few others. But the presence of actual working variations on these helps children see what they are doing.

- Masahiro Chatani, *Pop-up Origamic Architecture*, ISBN: 0-870406-56-6

Masahiro Chatani has a large number of books available dealing with Origamic Architecture. This book is simply one example, but a good one to start with, as it contains 0°, 90°, and 180° designs. Patterns are provided, along with photos of the results.

- Gwen Diehn, *Making Books that Fly, Fold, Wrap, Hide, Pop Up, Twist, and Turn*, ISBN: 1-579900-23-2

Aimed at grades 4-7, pop-ups are only a part of this book. It includes books in many forms that children can make for themselves. An ideal start on bookmaking for a young person, and this would be useful for teachers as well. Also available in paperback.

B.2 Kit Books

Books in this section are instructional books on paper engineering that contain patterns that can be cut out and assembled, or even pre-cut pieces. This allows beginners to get a start on

making pop-ups without making a design first. This is often a good way to begin.

- Mark Hiner, *Paper Engineering for Pop-Up Books and Cards*, ISBN: 0-906212-49-9

This book provides 10 devices to cut and assemble. They remain in the book for future reference. Included are wheels, pull-tabs and transformations as well as pop-ups. This is aimed at adults and is a good way to start making movable books.

- David A. Carter and James Diaz, *Let's Make It Pop-up*, ISBN: 0-689865-08-2

This books contains pre-cut pieces to assemble into pop-ups, and is recommended for ages 4-6. It's a good way to start young children, as no cutting is required. Some of the patterns can be found at Carter's web page (see Section B.2.2).

- Diego Uribe, *Fractal Cuts*, ISBN: 0-906212-88-X

This is an odd but wonderful book. It contains 10 90° cards to cut out and fold. All are based on self-similarity, and the book is a compendium of information on fractals, which is tied to the pop-ups. A book for high schoolers or adults, it would also be useful for a teacher who is using pop-up cards as fractal manipulatives.

- Carol Barton, *The Pocket Paper Engineer, Volume 1: Basic Forms*, ISBN: 0-962775-20-7

This book focuses on 90° elements and contains cards for the reader to make based on many variations of the basic elements. It's a bit expensive, but lovely, with pockets included to store the finished cards. Extra sets of cards are available separately. Future volumes are planned for 180° elements.

B.2.1 Web Sites

Using the links found on these sites, the interested reader can continue to explore. Web sites are of course ephemeral, but those chosen have been in existence for some time. Web sites particularly dealing with subjects of interest to teachers are reviewed in Section B.3.

B.2.2 Web Sites of Paper Engineers

Some of the paper engineers' sites contain instructional material or patterns, and are therefore very useful to the beginner.

- Robert Sabuda, <http://www.robertsabuda.com>

A wealth of articles, pictures, and pop-up making directions. One of the most useful sites on the web.

- David and Noelle Carter, <http://www.popupbooks.com/>

The "Surprise" and "Make It" links lead to patterns to print, cut and fold.

- Mark Hiner, <http://www.markhiner.co.uk>

This site contains no "how to" information, but has nice articles about the history and production of pop-ups.

- Masahiro Chatani, <http://www.japandesign.ne.jp/IAA/chatani>

This site is mostly in Japanese. Wonderful pictures of his origamic architecture designs.

- Carol Barton, <http://www.popularkinetics.com/>

Carol Barton's company, Popular Kinetics Press, produces books, and these are sold here. In addition, Carol teaches classes in pop-up making, and information on classes is on her website, as well as a blog on book arts.

B.2.3 Other Web Sites

Most of these sites contain photos, and sometimes videos or animations of pop-ups. In addition, there are many articles on the history and production of pop-ups. Many are aimed at collectors, but the beginning paper engineer can find inspiration in seeing the designs of the past.

- Pop-up Lady, <http://www.popuplady.com>

Contains a great variety of articles, links, and photos. Oriented toward collectors.

- Ann R. Montanaro, <http://www.rci.rutgers.edu/montanar>

The page has links to an exhibit of her collection, and to the Movable Book Society.

- Stichting Geschiedenis Kinderen Jeugdliteratuur,

<http://www.hetoudekinderboek.nl/>

This site is in Dutch. Has a wonderful collection of historical children's books, including photos of every page in each book—which is rare. "Beweegbare boeken" is the link for movable books.

- Movemania (Adriaan Heino), http://www.euronet.nl/users/ahaino/public_html/

This site has a history of movable books with examples.

- Pop Goes the Page—University of Virginia Library,

<http://www.lib.virginia.edu/small/exhibits/popup/>

An exhibit of movable books, arranged by history. Most illustrations are of the covers, unfortunately, but there are some pop-up pages shown.

- Origamic Architecture, <http://members.aol.com/kselena/OA/oamainpg.html>

A large page on OA with many photos and a great deal of information on the hobby.

- The Wonderful World of Pop-up and Animated Books, <http://popupbooks.net/>

This is a gallery of a personal (and large) collection of movable books. The visitor can list books by author, illustrator, etc. or title. Many photos of the book pages are included.

- Hawcock Books, How It's Done, <http://www.hawcockbooks.co.uk/howitsdone.pdf>

A color illustrated document on how pop-ups are made. This would be a good tool to show children about the manufacturing process.

- The Great Menagerie—University of North Texas,
<http://www.library.unt.edu/rarebooks/exhibits/popup/main.htm>

A collection of pop-ups of the 19th and 20th centuries, with videos of the action for some.

B.3 Resources for Teachers

This seems like a good place to list the resources for teachers that have been located, in order to have them all in one place. Pop-ups (and other movable books) can be used in the classroom in two ways, making pop-ups and using commercial books, and these uses sometimes overlap. This section has been roughly divided according to which of those uses is most important in the resource.

B.3.1 Making Pop-up Books in the Classroom

This selection ranges from books which present a curriculum using pop-up making through small activities that include pop-up making. The following five resources are the most important and are more fully described in Section 3.3.2. The reader is directed there for more information.

- Patrick Shannon and Barbara G. Samuels. Developing an understanding of literacy through production of pop-up books. *Reading Horizons*, 25(3):213221, Spring 1985.
- Paul Johnson, *Literacy Through the Book Arts*, ISBN: 0-435087-66-5
- Elaine Simmt and Brent Davis. Fractal cards: A space for exploration in geometry and discrete mathematics. *Mathematics Teacher*, 91:102108, Feb 1998.
- Malcolm Swan, Barbara Binns and John Gillespie, *Numeracy Through Problem Solving:*

Be a Paper Engineer (Teacher's Guide), ISBN: 0-582034-90-6 (Note: available through <http://www.mathshell.com/>)

- Paul Johnson, *Pop-Up Paper Engineering: Cross-Curricular Activities in Design Engineering Technology, English and Art*, ISBN: 1-850009-09-0

The following articles may also be of interest to teachers wishing to incorporate pop-up making into classroom activities.

- Gerry Bohning and Ann Phillips and Sandra Bryant, *Literature on the Move: Making and Using Pop-up and Lift-flap Books.*, ISBN: 1-563080-70-2

The first section of this book describes how to make many simple pop-up elements. The second section describes how to use pop-up making in grades K-6 by making books on themes in several subjects.

- Rose Reissman, Pop-Up Portfolio Research (Teaching Ideas), *English Journal*, 85(1):74-76, Jan 1996.

A project making pop-up portfolios for a unit on newspapers and politics is described. The students collected clippings and made pop-ups that included their reactions to the happenings.

- Rose C. Reissman, Give the Gift of Family Literacy—Student-Designed Gift Books, *English Journal*, 82(6):74-76, Oct 1993.

Describes a project involving students making gift books for their families. Pop-up books are included, but only as a part of the project.

- Sherry Ball, Creating Pop-ups. *Book Links*, 12(6):25-27, Jun-Jul 2003.

A few suggestions on how to use pop-up making in the classroom and a list of books and web links to get started.

- David Cassell, Maths Resource: Pop-Up Polyhedra. *Language Arts*, 17(1):24-27, Jan 1988.

Discusses polyhedra that pop-up by means of a rubber band. Folding nets are included.

- Hans Walser, The Pop-up Cuboctahedron. *The College Mathematics Journal*, 22(2):89-92, Mar 2000.

This is a more difficult rubber band polyhedral pop-up, probably for at least high school level.

- Giancarlo Navarra and Sue Pope, POP-UP Workshop. <http://www.pedf.cuni.cz/kmdm/download/aktivita/eltmaps/Classroom/12%20PopUpDef.pdf>

A workshop for teachers exploring the mathematical possibilities of 90° pop-ups. Visualization is stressed.

- V. Mohan Ram, Pop-up Engineering and Geometric Concepts: Mathematics Workshop http://www.hiceducation.org/Edu_Proceedings/V.%20Mohan%20Ram.pdf

Another online workshop for teachers on the geometric properties of 90° pop-ups. Some attention is given to geometric constraints.

- National Museum of Women in the Arts: Art, Books, and Creativity <http://www.artbookscreativity.org/>

A website exploring the connection of visual arts and writing through the making of art books. A year-long curriculum is available. This is a relatively new site.

- Vanessa Evans Huse, Nancy Larson Buemel and Rhonda Harris Taylor, Making Connections: From Paper to Pop-up Books. *Teaching Children Mathematics*, 1(1):14-17, Sep 1994.

Discusses using paper to teach mathematics. A simple pop-up card is shown, and activities around it are mentioned.

B.3.2 Using Commercial Pop-up Books in the Classroom

- Richard F. Abrahamson and Robert Stewart, Movable Books—A New Golden Age. *Language Arts*, 59(4):342-347, Apr 1982.

A much-cited article discussing how to use pop-up books in the classroom, some particularly valuable books to use, and a bit about making pop-ups in the classroom.

- Gerry Bohning and Marguerite C. Radencich, Math Action Books for Young Readers, *Arithmetic Teacher*, 37(1):40-48, Sep 1989.

Ideas for using pop-up and pull-tab books in primary math classes. Suggestions and a list of possible books to use are included.

- Gerry Bohning and Marguerite C. Radencich, Concept Action Books: Invitation to Participate. *Early Childhood Education Journal*, 15(4):16-20, Jun 1988.

Ways of using action books (including lift-the-flap and pop-ups) with young children. There are a few simple activities around making flap books and a list of useful books as well.

- Lea M. McGee and Rosalind Charlesworth, Books with movables: More than just novelties. *Reading Teacher*, 37(9):853-859, 1984.

Using movable books to hook young readers. Includes a list of books to use.

- Marguerite C. Radencich and Gerry Bohning, Pop up, pull down, push in, slide out: Natural Science Action Books, *Childhood Education*, 64(3):157-161, Feb 1988.

Ideas for using pop-up and pull-tab books in science classes. Suggestions and a list of possible books to use are included.

- Vivienne Smith, Lifting the flaps on information: purpose and play in non-fiction texts. *Reading*, 37(3):116-122,, 2003.

The purpose and function of flaps in lift-the-flap non-fiction books and why some succeed and some do not.

- Ann R. Montanaro, *Pop-up and movable books: A bibliography*, ISBN: 0-810837-28-5 (2000 update)

The standard reference for librarians on pop-up books published.

- Rhonda Harris Taylor and Nancy Larson Bluemel, Pop-up Books: An Introductory Guide. *Collection Building*, 22(1):21-32, 2003.
- Nancy Larson Bluemel, Rhonda Harris Taylor *Pop-up Books: A Guide for Teachers and Librarians* ISBN: 1-591583-98-5

These two resources are primarily for librarians, but would be useful for teachers. They give basic information on resources on pop-up books.