

# CENTER FOR OUTREACH SERVICES

## *ASL Subject-Specific Resources*

### SCIENCE

The [Center for Outreach Services](#) at the [Ohio School for the Deaf](#) has created this listing of resources to help individuals involved in Deaf education locate resources on how to use American Sign Language (ASL) to discuss science in academic settings. Participants in past online seminars with the Center for Outreach Services personally reviewed some resources. However, unless a reviewer's name is included, the information provided is based on the publisher's description. This listing is not comprehensive. Inclusion of materials on this list does not indicate an endorsement by the Center for Outreach Services. To provide corrections or to suggest resources, [contact us](#).

#### CONTENTS

Click on the links below to jump to the section:

[Science Vocabulary & Videos in English](#)

[Science Vocabulary in ASL](#)

[Science Videos in ASL](#)

[Interpreting Science Lessons](#)

[Educating Deaf Students about Science](#)

### *Science Vocabulary & Videos in English*

Resource Title	<b>Academic Content Standards for Science in Ohio</b>
Publisher	Ohio Department of Education
Format	Book (in print or online)
Main purpose	Document describing what students in Ohio are supposed to learn about science.
Possible uses for an educational interpreter	<ul style="list-style-type: none"> <li>The Grade-Level Indicators section has information that is similar to what interpreters look for in a lesson plan</li> <li>The glossary in the back defines terms and provides illustrations of concepts</li> <li>See the article entitled "Content Standards Benefit Us, Too!: Interpreters Can Use Content Standards to Prepare for Classes" by Janice E. Neider in the <a href="#">Winter 2008 edition</a> of <a href="#">Signals: News &amp; Resources for Ohio Educational Interpreters</a> at <a href="http://www.ohioschoolforthe deaf.org/outreach">www.ohioschoolforthe deaf.org/outreach</a></li> </ul>
How to access the resource	<ul style="list-style-type: none"> <li>View online through the Instructional Management System at <a href="https://ims.ode.state.oh.us">https://ims.ode.state.oh.us</a></li> <li>Order a copy of the content standards book for any subject by contacting the Ohio Department of Education. Call 1-877-OHIOEDU (or 1-877-644-6338) and asking for Karen Paschal in the Document Center.</li> </ul>

Resource Title	<b>Public School in Action</b>
Publisher	Northwestern Connecticut Community College
Format	Online video or DVD
Main purpose	Practice materials in spoken English from live K-12 classrooms, including interaction between teachers and students. A written description of each lesson also available with vocabulary terms (called a "script").
Topics Covered	Science topics: <ul style="list-style-type: none"> <li>Elementary E video (tape 5) – 4<sup>th</sup> grade lesson on batteries, electricity, and magnets</li> </ul>

	<ul style="list-style-type: none"> <li>• Middle school video (tape 8) – 6<sup>th</sup> grade lesson on the circulatory system, 8<sup>th</sup> grade lesson on electricity</li> <li>• Middle school video (tape 9) – 6<sup>th</sup> grade lesson on the circulatory system (part 2), 8<sup>th</sup> grade lesson on electricity (part 2), 7<sup>th</sup> grade lesson on chloroplasts</li> <li>• High school video (tape 11): High school lesson on anatomy &amp; physiology</li> </ul>
How to access the resource	<ul style="list-style-type: none"> <li>• Download from the National Clearinghouse of Rehabilitation Training Materials (NCRTM). Go to <a href="http://maple.cybertoolsforlibraries.com/cgi-bin/CyberHTML?NCRTMHO">http://maple.cybertoolsforlibraries.com/cgi-bin/CyberHTML?NCRTMHO</a>. Search for: Public School Action.</li> </ul>

Resource Title	<b>Educational Interpreting Series, Program #1F: A Lesson with Heart</b>
Publisher	Sign Enhancers
Format	DVD or online video
Main purpose	A fourth grade science teacher presents a lesson in spoken English on anatomy, including the respiratory system, digestive system, and the heart. Two certified interpreters provide separate model interpretations.
How to access the resource	<ul style="list-style-type: none"> <li>• Purchase from Sign Enhancers (800) 767-4461 <a href="http://www.signenhancers.com">www.signenhancers.com</a></li> <li>• Borrow or view online from the Described and Captioned Media Program at <a href="http://www.dcmp.org/Catalog/TitleDetail.aspx?TID=5702">http://www.dcmp.org/Catalog/TitleDetail.aspx?TID=5702</a></li> <li>• Borrow from the Deafness Collection at the State Library of Ohio at <a href="http://slonet.state.oh.us/">http://slonet.state.oh.us/</a></li> </ul>

See also resources in [Interpreting Science Lessons](#)  
Return to [Contents](#)

## *Science Vocabulary in ASL*

Resource Title	<b>Math &amp; Science Sign Language Lexicon</b>
Publisher	National Technical Institute of the Deaf
Format	Website
Main Purpose	See short sign video clips and images for different science and math terms. Search for terms or browse by category or alphabetical listings. Also includes a discussion on <a href="#">selecting signs</a> for technical terms in the classroom.
How to access	<a href="http://idea3.rit.edu/builder/videoWord/genVideoWord.asp">http://idea3.rit.edu/builder/videoWord/genVideoWord.asp</a>

Resource Title	<b>Embe Outreach: American Sign Language Library (NEEDS Outreach)</b>
Format	Website
Main purpose	These online video clips contain vocabulary that is generally presented in specific academic classes in elementary school through high school.
Topics covered	Biology, Physics, Technology
How to access	<a href="http://www.needsoutreach.org/Pages/sl.html">http://www.needsoutreach.org/Pages/sl.html</a>

Resource Title	<b>Aeronautics Sign Language Dictionary</b>
Publisher	NASA's Learning Technologies Project
Format	Website
Main purpose	Animated images of the sign for aeronautics terms with accompanying definition. Site intended for K-8 students.
How to access	<a href="http://wings.avkids.com/Book/Signing/index.html">http://wings.avkids.com/Book/Signing/index.html</a>

Resource Title	<b>ASL Technical &amp; Specialized Vocabulary Resource Dictionary</b>
Author	David Bar-Tzur
Publisher	Signs of Development
Format	CD-Rom
Main purpose	Dictionary of specialized topics, including science-related topics
Topics Covered	Disc 2: Mind and body, Systematic thinking, applied sciences, hard sciences
How to access the resource	<ul style="list-style-type: none"> <li>• Purchase from Signs of Development <a href="http://www.signs-of-development.org">www.signs-of-development.org</a></li> <li>• Borrow from the Deafness Collection at the State Library of Ohio at <a href="http://slonet.state.oh.us/">http://slonet.state.oh.us/</a></li> </ul>

Resource Title	<b>Vocabulary Builders in Sign Language: Computers</b>
Publisher	Jacksonville State University
Format	DVD or online video
Main purpose	An introduction to sign vocabulary that is specific to computers
How to access the resource	Borrow the DVD or view online from the Described and Captioned Media Program at <a href="http://www.dcmp.org/Catalog/TitleDetail.aspx?TID=4488">http://www.dcmp.org/Catalog/TitleDetail.aspx?TID=4488</a>

Resource Title	<b>Vocabulary Builders in Sign Language: Science</b>
Publisher	Jacksonville State University
Format	DVD or online video
Main purpose	An introduction to sign vocabulary that is specific to science
How to access the resource	Borrow the DVD or view online from the Described and Captioned Media Program at <a href="http://www.dcmp.org/Catalog/TitleDetail.aspx?TID=4491">http://www.dcmp.org/Catalog/TitleDetail.aspx?TID=4491</a>

Resource Title	<b>Signs for Science and Mathematics: A Resource Book for Teachers and Students</b>
Reviewer	Andrea Lyon, Interpreting for Math Classes Online Study Group, 2006
Authors	Frank Caccamise and Harry G. Lang
Publisher	National Technical Institute of the Deaf, Rochester Institute of Technology
Publication Year	1995
Format	Book
Main purpose	English-based sign vocabulary resource
Topics covered	Math and Science
Summary	A resource for math and science terminology in sign. Black and white sketches of models demonstrate the math signs. Symbol explanation pages are provided to help better understand the movements that go along with the signs.
How to access the resource	Rochester Institute of Technology bookstore at <a href="http://rit.bncollege.com">http://rit.bncollege.com</a> , (585) 475-2501; <a href="mailto:290www@rit.edu">290www@rit.edu</a> . Request item number 000010046. Cost is \$25. Find under the title Technical Signs 10.

Resource Title	<b>Deaf Educational Access for Computational Science</b>
Reviewer's Name	Karen Silver, Interpreting for Math Classes Online Study Group, 2007
Publisher	The Shoder Education Foundation, Inc
Publication Year	2005
Format	Website
Main purpose	DEAF CS is a collection of activities and lessons that use modeling and simulation technologies to help students and their teachers explore math and science concepts. As Deaf students read the material, they can access concepts in their natural communication mode through authentic ASL, signed by Deaf educators and students.
Topics covered	Technical signs, computer, math and science related activities
Summary	"Utilize technology in classrooms to provide Deaf students equal opportunities to succeed in math and science. Also, to provide Interpreters and Deaf Educators the resources to make this an efficient and beneficial lesson through ASL glossaries and lesson plans."
Possible uses for an educational interpreter	<ul style="list-style-type: none"> <li>Click on the ASL button within the glossary and see a signed explanation for every word in the dictionary or resource within the website</li> <li>Deaf students can utilize as a supplement to instruction. More and more, computers are becoming of greater importance to all students. This resource can be used to exploit students' familiarity with computers to aid instruction. There are wonderfully clear signed demonstrations and activities available through this website in case a concept is just not sinking in via interpretation alone. This would be a great collaboration with the math and computer teachers to make many different math lessons Deaf friendly.</li> </ul>
Notes	This website has a glossary of common science and math terms with simple definitions Deaf students with lower reading levels would be able to comprehend. There are also explanations for each glossary term in sign language.
How to access the resource	<a href="http://www.shodor.org/succeed-hi/index.html">http://www.shodor.org/succeed-hi/index.html</a> If you see only a general shodor.org page and not "Deaf CS Home", do an internet search for Deaf Educational Access for Computational Science to get to the right page.

See also resources in [Interpreting Science Lessons](#)

Return to [Contents](#)

## *Science Videos in ASL*

Resource Title	<b>Educational Interpreting Series, Program #1K: The World in Your Hands</b>
Publisher	Sign Enhancers
Format	DVD or online video
Main purpose	A middle/high school deaf science teacher lectures about earth's delicate balance. Two certified interpreters provide separate model interpretations.
How to access the resource	<ul style="list-style-type: none"> <li>Purchase from Sign Enhancers (800) 767-4461 <a href="http://www.signenhancers.com">www.signenhancers.com</a></li> <li>Borrow or view online from the Described and Captioned Media Program at <a href="http://www.dcmp.org/Catalog/TitleDetail.aspx?TID=5714">http://www.dcmp.org/Catalog/TitleDetail.aspx?TID=5714</a></li> <li>Borrow from the Deafness Collection at the State Library of Ohio at <a href="http://slonet.state.oh.us/">http://slonet.state.oh.us/</a></li> </ul>

Resource Title	<b>Educational Interpreting Series, Program #1L: Science &amp; Drama in Motion</b>
Publisher	Sign Enhancers
Format	DVD or online video
Main purpose	A deaf high school teacher, Isias Eaton, signs several lessons to students: one on a science topic, plus an ABC story, a classifier drama, and a story from deaf folklore, Eyeth. Two certified interpreters provide separate model interpretations to demonstrate how to interpret for this teacher.
How to access the resource	<ul style="list-style-type: none"> <li>• Purchase from Sign Enhancers (800) 767-4461 <a href="http://www.signenhancers.com">www.signenhancers.com</a></li> <li>• Borrow or view online from the Described and Captioned Media Program at <a href="http://www.dcmp.org/Catalog/TitleDetail.aspx?TID=5713">http://www.dcmp.org/Catalog/TitleDetail.aspx?TID=5713</a></li> <li>• Borrow from the Deafness Collection at the State Library of Ohio at <a href="http://slonet.state.oh.us/">http://slonet.state.oh.us/</a></li> </ul>

Resource Title	<b>Specialized Sign-Language Terminology for Academic Settings: General Biology</b>
Publisher	Western Oregon State College
Format	Video to download
Main purpose	Deaf teacher presents to deaf students on fundamental biology concepts in ASL.
How to access the resource	Download from the National Clearinghouse Rehabilitation Training Materials program. Go to <a href="http://maple.cybertoolsforlibraries.com/cgi-bin/CyberHTML?NCRTMHO">http://maple.cybertoolsforlibraries.com/cgi-bin/CyberHTML?NCRTMHO</a> . Search for the title.

Resource Title	<b>Food Safety and Inspection Service -- SignFSIS</b>
Publisher	United States Department of Agriculture
Format	Online videos
Main purpose	Videos on preventing food-borne illnesses in ASL with captioning
How to access	<a href="http://www.fsis.usda.gov/News_%26_Events/SignFSIS/">http://www.fsis.usda.gov/News_%26_Events/SignFSIS/</a>

Resource Title	<b>Health Information for the Deaf and Hard-of-Hearing Community</b>
Publisher	Advocate Illinois Masonic Medical Center
Format	Online videos
Main purpose	Online ASL videos regarding general health issues and prevention plus health screen surveys with questions presented in ASL. All videos also captioned.
How to access	<a href="http://www.advocatehealth.com/immc/services/other/deafWeb/index.html">http://www.advocatehealth.com/immc/services/other/deafWeb/index.html</a>

Resource Title	<b>DeafDoc</b>
Format	Website
Main purpose	A Deaf doctor explains medical issues in ASL with voice-over and captioning.
How to access	<a href="http://www.deafdoc.org">http://www.deafdoc.org</a>

Resource Title	<b>ASL Cancer Education Program</b>
Publisher	University of California, San Diego
Format	Online videos
Main purpose	Online ASL videos on different kinds of cancer with English transcripts.
How to access	<a href="http://www.cancer.ucsd.edu/deafinfo/">http://www.cancer.ucsd.edu/deafinfo/</a>

Resource Title	<b>Deaf MD</b>
Format	Website
Main purpose	Look up diseases and treatments for information in ASL with English transcripts.
How to access	<a href="http://www.deafmd.org/">http://www.deafmd.org/</a>

Resource Title	<b>Health Information Translations in American Sign Language</b>
Format	Online videos
Main purpose	Online videos in spoken English translated into ASL on a variety of health topics
How to access	<a href="http://www.healthinfotranslations.org/american_sign_language.php">http://www.healthinfotranslations.org/american_sign_language.php</a>

Return to [Contents](#)

## *Interpreting Science Lessons*

Resource Title	<b>How Can I Interpret it When I Don't Know What it Means?!: Chemical Reactions</b>
Author(s)	David Bar-Tzur
Publisher	Signs of Development
Format	CD-Rom
Main purpose	View lectures in English and see model interpretations
Topics Covered	Elements and compounds, molecules and reactions, stoichiometry
How to access the resource	<ul style="list-style-type: none"> <li>• Purchase from Signs of Development <a href="http://www.signs-of-development.org">www.signs-of-development.org</a></li> <li>• Borrow this CD-Rom from the Deafness Collection at the State Library of Ohio at <a href="http://slonet.state.oh.us/">http://slonet.state.oh.us/</a></li> </ul>

Resource Title	<b>How Can I Interpret it When I Don't Know What it Means?!: Classifiers &amp; Wave Dynamics</b>
Author(s)	David Bar-Tzur
Publisher	Signs of Development
Format	CD-Rom
Main purpose	Discussion how to use classifiers to convey technical information, view lectures in English and see model interpretations
Topics Covered	Physics
How to access the resource	<ul style="list-style-type: none"> <li>• Purchase from Signs of Development <a href="http://www.signs-of-development.org">www.signs-of-development.org</a></li> <li>• Borrow this CD-Rom from the Deafness Collection at the State Library of Ohio at <a href="http://slonet.state.oh.us/">http://slonet.state.oh.us/</a></li> </ul>

Resource Title	<b>Negotiating Technical Topics</b>
Author(s)	David Bar-Tzur
Publisher	Signs of Development
Format	CD-Rom
Main purpose	This program teaches the signs for various specialized and technical topics, including topics in the field of science.
How to access the resource	<ul style="list-style-type: none"> <li>• Purchase from Signs of Development <a href="http://www.signs-of-development.org">www.signs-of-development.org</a></li> <li>• Borrow from the Deafness Collection at the State Library of Ohio at <a href="http://slonet.state.oh.us/">http://slonet.state.oh.us/</a></li> </ul>

Resource Title	<b>Stomach This: The Digestive System in English and ASL</b>
Author	Todd Tourville
Publisher	RSA Region V Interpreter Education Project
Format	CD-Rom or video to download
Main purpose	Technical information to assist in interpreting for content related to the digestive system. An independent study packet using this CD is available (see below).
Topics Covered	Lectures on the digestive system in both ASL and English, preparation materials

	for learning about the digestive system
How to access the resource	<ul style="list-style-type: none"> <li>The CD-Rom can be purchased for \$10 (including shipping). See the Digiterp Communications website at <a href="http://www.digiterp.com">www.digiterp.com</a> or contact Tasha Honkola from the Northeast Service Cooperative at <a href="mailto:thonkola@nesc.k12.mn.us">thonkola@nesc.k12.mn.us</a> or 218.741.0750, ext 105.</li> <li>Borrow this CD-Rom from the Deafness Collection at the State Library of Ohio at <a href="http://slonet.state.oh.us/">http://slonet.state.oh.us/</a></li> <li>Download the CD files from the National Clearinghouse Rehabilitation Training Materials program. Search for the title at <a href="http://maple.cybertoolsforlibraries.com/cgi-bin/CyberHTML?NCRTMHO">http://maple.cybertoolsforlibraries.com/cgi-bin/CyberHTML?NCRTMHO</a>.</li> <li>For the independent study packet, see <a href="http://www.stkate.edu/project/">http://www.stkate.edu/project/</a>, look for Resources and view and print <i>Bite-Sized Pieces</i>.</li> </ul>

Resource Title	<b>To the Heart of the Matter: The Cardiovascular System in English &amp; ASL</b>
Author	Todd Tourville
Publisher	RSA Region V Interpreter Education Project
Format	CD-Rom or video to download
Main purpose	Technical information to assist in interpreting for content related to the cardiovascular system. An independent study packet using this CD is available
Topics Covered	Lectures on the cardiovascular system in both ASL and English, preparation materials for learning about the cardiovascular system
How to access the resource	<ul style="list-style-type: none"> <li>The CD-Rom can be purchased for \$10 (including shipping). See the Digiterp Communications website at <a href="http://www.digiterp.com">www.digiterp.com</a> or contact Tasha Honkola from the Northeast Service Cooperative at <a href="mailto:thonkola@nesc.k12.mn.us">thonkola@nesc.k12.mn.us</a> or 218.741.0750, ext 105.</li> <li>Borrow this CD-Rom from the Deafness Collection at the State Library of Ohio at <a href="http://slonet.state.oh.us/">http://slonet.state.oh.us/</a></li> <li>Download from the National Clearinghouse Rehabilitation Training Materials program. Go to <a href="http://maple.cybertoolsforlibraries.com/cgi-bin/CyberHTML?NCRTMHO">http://maple.cybertoolsforlibraries.com/cgi-bin/CyberHTML?NCRTMHO</a>. Search for the title.</li> <li>For the independent study packet, see <a href="http://www.stkate.edu/project/">http://www.stkate.edu/project/</a>, look for Resources and view and print <i>Steps to the Beat</i>.</li> </ul>

Resource Title	<b>ASL &amp; English Resources for Interpreting in Medical Settings</b>
Publisher	The Catie Center at the College of St. Catherine
Format	Website
Main purpose	A comprehensive guide to medical interpreting resources, such as videos, self-study guides, websites and an online discussion board. Included are resources for visuals for health topics, such as diagrams and 3D animations, which can assist in understanding and in using classifiers to discuss these concepts.
How to access	<a href="http://www.medicalinterpreting.org">http://www.medicalinterpreting.org</a>

Resource Title	<b>How Do You Sign Photosynthesis?: Subject-Specific Signs in the Classroom</b>
Author	Sarah McKinney
Publication	Signals: News & Resources for Ohio Educational Interpreters
Publisher	Interpreting & Sign Language Resources (ISLR)
Format	Article
Main purpose	Article on techniques for interpreting subject-specific vocabulary, including nonce fingerspelling, classifier/sign compounds, and subject-specific vocabulary.
How to access the resource	Signals newsletters archive <a href="http://www.ohioschoolforthe deaf.org/islr_newsletters.aspx">www.ohioschoolforthe deaf.org/islr_newsletters.aspx</a> . See the <a href="#">Summer 2006 edition</a> .

## *Educating Deaf Students about Science*

Resource Title	<b>Methods and Materials for Teaching Science to Deaf Students</b>
Publisher	National Technical Institute for the Deaf
Format	Website
Main purpose	Resources for teachers including: <ul style="list-style-type: none"> <li>• Teaching strategies</li> <li>• Developing literacy</li> <li>• Curriculum development</li> <li>• Deaf scientists resources</li> <li>• Classroom technology</li> <li>• Deaf students' projects</li> <li>• Classroom communication</li> <li>• Science Signs Lexicon</li> <li>• Bibliography</li> </ul>
How to access the resource	<a href="http://idea3.rit.edu/hgl9008/msse/">http://idea3.rit.edu/hgl9008/msse/</a>

Resource Title	<b>Deaf Scientist Corner</b>
Publisher	Texas Woman's University
Format	Website
Main purpose	Biographies of Deaf scientists
How to access the resource	<a href="http://www.twu.edu/dsc/">http://www.twu.edu/dsc/</a>

Return to [Contents](#)