



TECHNICAL VOCATIONAL: WELDING TECHNOLOGY GRADES 9-12

A Reference for Selecting Learning
Resources

Manitoba Education and Training Cataloguing in Publication Data

Copyright © 2016, the Government of Manitoba, represented by the Minister of Education and Training.

Manitoba Education and Training
School Programs Division
Winnipeg, Manitoba, Canada

Every effort has been made to acknowledge original sources and to comply with copyright law. If cases are identified where this has not been done, please notify Manitoba Education and Training. Errors or omissions will be corrected in a future edition.

Any websites referenced in this document are subject to change without notice. Educators are advised to preview and evaluate websites and online resources before recommending them for student use.

This resource is available on the Manitoba Education and Training website at www.edu.gov.mb.ca/k12/learnres/bibliographies.html.

A C K N O W L E D G E M E N T S

Manitoba Education and Training acknowledges the individuals involved in the review and selection of learning resources to support provincial curriculum implementation. Appreciation is also extended to school divisions within Manitoba that support teachers' participation in the review. Finally, publishers, producers, and distributors are thanked for their submission of learning resources for consideration.

C O N T E N T S

| | |
|----------------------------|----|
| Acknowledgements..... | 3 |
| Contents | 4 |
| Introduction..... | 5 |
| Titles & Descriptions..... | 7 |
| Audience..... | 12 |
| Grade | 13 |
| Distributor Directory..... | 15 |

INTRODUCTION

REFERENCE FOR SELECTING LEARNING RESOURCES

TECHNICAL VOCATIONAL: Welding Technology Grades 9-12: A Reference For Selecting Learning Resources is a reference tool provided by Manitoba Education and Training to help educators select student and teacher learning resources to support the curriculum. Learning resources may be purchased through the Manitoba Learning Centre (LRC) (formerly known as the Manitoba Text Book Bureau (MTBB)).

LEARNING RESOURCES REVIEWS

Publishers submit resources for review in response to the Department's request for new learning resources to support provincial curricula. Teachers, nominated by superintendents of school divisions, are selected as teacher-evaluators. Using a collaborative review process, the teacher-evaluators examine the materials according to the resource-selection criteria to make recommendations regarding the suitability of the resources for Manitoba students and teachers.

RESOURCE SELECTION CRITERIA

Learning resources are selected based on the basis of their fidelity with the rationale, philosophy, processes, and learning outcomes identified in each curriculum. Four evaluation criteria are used in selecting learning resources:

- **Curriculum Fit/Content/Philosophy:** the degree to which the content and processes of the resource align with the curriculum, thus providing support for curriculum implementation.
- **Instructional Design:** the degree to which the resource provides for multiple approaches to learning, has a wide range of use, is current, and reflects current pedagogical theory and practice.
- **Social Considerations:** the degree to which the resource is free of bias and stereotyping. The resource is examined for Canadian content, the use of culturally diverse examples, and accurate portrayal of First Nations, Inuit, and Métis peoples. Cautionary notes are added to alert teachers to potentially sensitive curriculum-fit issues or potential community concerns related to the resource.
- **Technical Design:** the degree to which the resource is visually appealing and has a logical and consistent form.

When selecting learning and teaching resources, teachers should consider how the resources meet the learning requirements of students, the perspectives of the student population, and local decisions related to the delivery of potentially sensitive content.

TERMS AND DEFINITIONS

The following terms and definitions are used to describe the learning resources:

- **Breadth:** identifies learning resources that address a wide range of student learning outcomes for a particular grade.
- **Depth:** identifies learning resources that provide effective learning experiences in greater detail for a narrower grouping of student learning outcomes.
- **Breadth and Depth:** identifies comprehensive learning resources that provide both breadth and depth dimensions for an extensive grouping of student learning outcomes.
- **Teacher Reference:** identifies resources that assist teachers in implementing the curriculum, including background information for teacher use; may identify teaching suggestions and learning activities.
- **Teacher Guide:** identifies a separate guide for teachers or a teacher's edition of a **Student Text**.

PURCHASE OF LEARNING RESOURCES

The learning resources described in the bibliography are available for purchase through the Manitoba Learning Resources Centre (LRC) (formerly known as the Manitoba Text Book Bureau). For information or assistance regarding the purchase of learning resources, contact:

The Manitoba Learning Resource Centre (LRC)

Toll free: 866-771-6822

Telephone: 204-483-5040

Fax: 204-483-5041

Email: mtbb@gov.mb.ca

Online catalogue: <<http://www.mtbb.mb.ca>>



TITLES & DESCRIPTIONS

Welding and Metal Fabrication

Publisher : Delmar Publishers Inc.

Subject/Grade

| | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| Welding Technology | | | | | | | | | | ✓ | ✓ | ✓ | ✓ |

Welding and Metal Fabrication is a comprehensive student and teacher resource with a traditional instructional design and a focus on hands-on project work. It covers all of the Manitoba Curricular goals with the exception of employability skills. It is appropriate for grades nine to twelve, providing well designed graphics and images.

Each unit comes with projects that progressively build on the application of skills introduced in the text. The Teacher Resources are provided online or on a CD. The CD contains PowerPoint lecture slides, ExamView test bank, an electronic version of the Instructor's Guide, and an Image Library.

The strength of this text is the 58 unit projects which cover almost all curricular goals and help students to think in creative ways and find multiple solutions to fabrication problems.

Welding and Metal Fabrication: Student Resource

Author(s): Larry Jeffus

Audience: Student

Year: 2012

Pagination: 822 p.

ISBN: 9781418013745

Format: Print

Distributor: Nelson Education Ltd.

Date Recommended: November 28, 2016

Publisher : Delmar Publishers Inc.

Welding and Metal Fabrication: Workbook

Author(s): Larry Jeffus

Audience: Student

Year: 2012

Pagination: 411 p.

ISBN: 9781418013752

Format: Print

Distributor: Nelson Education Ltd.

Date Recommended: November 28, 2016

Publisher : Delmar Publishers Inc.

Welding and Metal Fabrication:Instructor Resource

| | | | |
|---------------------|------------------------|--------------------------|-------------------|
| Author(s): | Larry Jeffus | Audience: | Teacher |
| Year: | 2012 | | |
| Pagination: | unp. | | |
| ISBN: | 9781418013776 | | |
| Format: | CD-ROM | | |
| Distributor: | Nelson Education Ltd. | Date Recommended: | November 28, 2016 |
| Publisher : | Delmar Publishers Inc. | | |

Welding Fundamentals

Publisher : Goodheart-Willcox Publisher

Subject / Grade

| | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| Welding Technology | | | | | | | | | | ✓ | ✓ | ✓ | ✓ |

Welding Fundamentals is a comprehensive student and teacher resource in which the outlined learning objectives meet all goals of the Manitoba welding curriculum with the exception of rigging and hoisting. This student text is well designed for grades 9-12, using accessible language with clearly designed graphics and illustrations. The text is supported by the G-W website which provides mobile access to student learning tools such as photo identification and matching activities (flashcards), self-check review questions, and vocabulary exercises. These tools also allow students the opportunity to interact with each other while studying or completing work assignments using technologies such as tablets or Smartphones. Other curricular subjects are linked such as Math For Welding and STEM. All of the most common welding processes are covered within the eight sections of this engaging student text.

Novice and experienced teachers will find the integrated tools helpful. The student Lab Workbook uses short tear-out pages for each of the 36 Assigned Jobs/Lessons that reinforce the concepts taught within the text.

The Instructor Resources is provided on a CD and is also available online. It includes Instructor Presentations for Power Point which are editable, ExamView Assessment Suite, Answer Keys, and Lesson Plans.

The strength of this resource is its ease of use and focus toward high school students as opposed to post-secondary audiences.

Welding Fundamentals

| | | | |
|--------------------|--|--------------------------|-------------------|
| Author(s): | William A. Bowditch, Kevin E. Bowditch, Mark A. Bowditch | Audience: | Student |
| Edition: | Fifth Edition | | |
| Year: | 2017 | | |
| Pagination: | 636 p. | | |
| ISBN: | 978-1-63126-328-6 | | |
| Format: | Print | | |
| Publisher: | Goodheart-Willcox Publisher | Date Recommended: | November 28, 2016 |

Welding Fundamentals: Examview Assessment Suite

| | | | |
|--------------------|--------------------------------|--------------------------|-------------------|
| Edition: | Fifth Edition | Audience: | Teacher |
| Year: | 2017 | | |
| Pagination: | unp. | | |
| ISBN: | 978-1-63126-339-2 | | |
| Format: | Print | | |
| Publisher: | Goodheart-Willcox Publisher | Date Recommended: | November 28, 2016 |

Welding Fundamentals: Instructor's Presentations for PowerPoint

| | | | |
|--------------------|--------------------------------|--------------------------|-------------------|
| Edition: | Fifth Edition | Audience: | Teacher |
| Year: | 2017 | | |
| Pagination: | unp. | | |
| ISBN: | 978-1-63126-340-8 | | |
| Format: | Print | | |
| Publisher: | Goodheart-Willcox Publisher | Date Recommended: | November 28, 2016 |

Welding Fundamentals: Instructor's Resource CD

| | | | |
|-----------------|---------------|------------------|---------|
| Edition: | Fifth Edition | Audience: | Teacher |
|-----------------|---------------|------------------|---------|

Year: 2017
Pagination: unpaginated
ISBN: 978-1-63126-338-5
Format: Print

Publisher: Goodheart-Willcox
Publisher

Date Recommended: November 28, 2016

Welding Fundamentals: Lab Workbook

Author(s): William A. Bowditch,
Kevin E. Bowditch, Mark
A. Bowditch

Audience: Student

Edition: Fifth Edition

Year: 2017

Pagination: 320 p.

ISBN: 978-1-63126-329-3

Format: Print

Publisher: Goodheart-Willcox
Publisher

Date Recommended: November 28, 2016

A U D I E N C E

Student

Welding and Metal Fabrication

Welding and Metal Fabrication: Student Resource

Welding and Metal Fabrication: Workbook

Welding Fundamentals

Welding Fundamentals

Welding Fundamentals: Lab Workbook

Teacher

Welding and Metal Fabrication

Welding and Metal Fabrication: Instructor Resource

Welding Fundamentals

Welding Fundamentals: Examview Assessment Suite

Welding Fundamentals: Instructor's Presentations for PowerPoint

Welding Fundamentals: Instructor's Resource CD

GRADE

Grade 9

Welding and Metal Fabrication

Welding and Metal Fabrication: Student Resource

Welding and Metal Fabrication: Workbook

Welding and Metal Fabrication: Instructor Resource

Welding Fundamentals

Welding Fundamentals

Welding Fundamentals: Examview Assessment Suite

Welding Fundamentals: Instructor's Presentations for PowerPoint

Welding Fundamentals: Instructor's Resource CD

Welding Fundamentals: Lab Workbook

Grade 10

Welding and Metal Fabrication

Welding and Metal Fabrication: Student Resource

Welding and Metal Fabrication: Workbook

Welding and Metal Fabrication: Instructor Resource

Welding Fundamentals

Welding Fundamentals

Welding Fundamentals: Examview Assessment Suite

Welding Fundamentals: Instructor's Presentations for PowerPoint

Welding Fundamentals: Instructor's Resource CD

Welding Fundamentals: Lab Workbook

Grade 11

Welding and Metal Fabrication

Welding and Metal Fabrication: Student Resource

Welding and Metal Fabrication: Workbook

Welding and Metal Fabrication: Instructor Resource

Welding Fundamentals

Welding Fundamentals

Welding Fundamentals: Examview Assessment Suite

Welding Fundamentals: Instructor's Presentations for PowerPoint

Welding Fundamentals: Instructor's Resource CD

Welding Fundamentals: Lab Workbook

Grade 12

Welding and Metal Fabrication

Welding and Metal Fabrication: Student Resource

Welding and Metal Fabrication: Workbook

Welding and Metal Fabrication: Instructor Resource
Welding Fundamentals
Welding Fundamentals
Welding Fundamentals: Examview Assessment Suite
Welding Fundamentals: Instructor's Presentations for PowerPoint
Welding Fundamentals: Instructor's Resource CD
Welding Fundamentals: Lab Workbook

DISTRIBUTOR DIRECTORY

The Manitoba Learning Resource Centre (LRC) (formerly known as the Manitoba Text Book Bureau (MTBB))

Box 910

Souris, MB R0K 2C0

Toll free: 866-771-6822

Telephone: 204-483-5040

Fax: 204-483-5041

Email: mtbb@gov.mb.ca

Online catalogue: <http://www.mtbb.mb.ca>

Goodheart-Willcox Publisher

18604 West Creek Drive

Tinley Park, Illinois 60477-6243

Phone: (866) 522-5702

Fax: (866) 836-1824

www.oupcanada.com

Nelson Education Ltd.

1120 Birchmount Road

Toronto ON M1K 5G4

Phone: (800) 668-0671

Fax: (800) 430-4445

www.nelson.com