SENIOR 2 SCIENCE

Manitoba Curriculum Framework of Outcomes
(Draft April 2001)

2001

Manitoba Education, Training and Youth

Manitoba Education, Training and Youth Cataloguing in Publication Data

372.35043 Senior 2 science: Manitoba

curriculum framework of outcomes (Draft April 2001).

Includes bibliographical references. ISBN 0-7711-2707-3

1. Science—Study and Teaching—Manitoba.

2. Science—Manitoba—Curricula. 3. Science—Study and teaching—Science. I. Manitoba. Dept. of Education, Training and Youth.

Copyright © 2001, the Crown in Right of Manitoba as represented by the Minister of Education, Training and Youth. Manitoba Education, Training and Youth, School Programs Division, 1970 Ness Avenue, Winnipeg, Manitoba R3J 0Y9.

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 inform Manitoba Education, Training and Youth. Errors or omissions will be corrected in a future edition.

Acknowledgements

Manitoba Education, Training and Youth wishes to acknowledge the contribution of the Council of Ministers of Education, Canada and the various provinces and territories who participated in the development of the *Common Framework of Science Learning Outcomes K to 12* (upon which this document is based), as well as the many interested Manitoba individuals and groups who provided valuable advice and assistance during the development and review process.

We also thank the following people for their contribution toward the development of the *Senior 2 Science: Manitoba Curriculum Framework of Outcomes (Draft April 2001).*

Principal Writer

Donna Smith Education Program University of Winnipeg

Members of the Manitoba development team for the Senior 2 Science: Manitoba Curriculum Framework of Outcomes

Diane Blankenborg Silver Heights Collegiate St. James-Assiniboia S.D. No. 2

George Bush Independent Consultant

Danièle Dubois-Jacques Collège Lorette Collegiate Seine River S.D. No. 14
Ryan Gray Hapnot Collegiate Flin Flon S.D. No. 46

Georges Kirouac Collège régional Gabrielle-Roy Division scolaire franco-manitobaine N° 49

Heather MarksÉcole secondaire SislerWinnipeg S.D. No. 1Coleen McKellarCrocus Plains Regional SecondaryBrandon S.D. No. 40Don MetzEducation ProgramUniversity of Winnipeg

John Murray St. Boniface Diocesan High School Catholic Schools Commission (until August 2000)

Richard Verrier École Pointe-des-Chenes Division scolaire franco-manitobaine N° 49

Kindergarten to Senior 4 Science Overview Committee (January 98-June 99)

Julie BaconÉcole secondaire Oak ParkAssiniboine South S.D. No. 3George BushSt. James-Assiniboia S.D. No. 2St. James-Assiniboia S.D. No. 2

Hélène Desrosiers École Lagimodière Division scolaire franco-manitobaine n° 49

Dan Forbes Ste. Anne Elementary School Seine River S.D. No. 14

Georges Kirouac Collège régional Gabrielle-Roy Division scolaire franco-manitobaine n° 49

Judy KyliukDalhousie SchoolFort Garry S.D. No. 5Coleen McKellarCrocus Plains Regional SecondaryBrandon S.D. No. 40Don MetzThe CollegiateUniversity of Winnipeg

John Murray St. Boniface Diocesan High School Catholic Schools Commission

Gerald Rosner Garden City Collegiate Seven Oaks S.D. No. 10
Barb Wall Donwood School River East S.D. No. 9
Leslie Wurtak Bairdmore School Fort Garry S.D. No. 5

Kindergarten to Senior 4 Science Steering Committee

Ron Banister Manitoba Teachers' Society Winnipeg S.D. No. 1

Sharon Burns Manitoba Association of Parent Councils

Randy Cielen Joseph Teres School Transcona-Springfield S.D. No. 12
Terry Deroo Trades Department Assiniboine Community College

Kay Harvey Manitoba Association of School Trustees Whiteshell S.D. No. 2408
Veronica Klassen Eastwood Elementary School Mystery Lake S.D. No. 2355

Manitoba Association of School Superiotes due to Science Pieces S.D. No. 14

Guy Lacroix Manitoba Association of School Superintendents Seine River S.D. No. 14

Robert Mauthe St. Paul's Collegiate White Horse Plain S.D. No. 20 (until June 2000)

Jan PazdzierskiMcIsaac SchoolFlin Flon S.D. No. 46Gordon RobinsonFaculty of ScienceUniversity of Manitoba

Rick Skarban Manitoba Association of Principals Mystery Lake S.D. No. 2355

Debbie Spelchak Glenlawn Collegiate St. Vital S.D. No. 6

Rob Striemer Science Teachers' Association of Manitoba Transcona-Springfield S.D. No. 12

Dawn L. Sutherland Education Program University of Winnipeg

School Programs Division Staff

Lee-Ila Bothe Coordinator Production Support Unit

Program Development Branch

Diane Cooley Project Manager Curriculum Unit

Program Development Branch

Grant Moore Publications Editor Production Support Unit

Program Development Branch

John Murray Project Leader Curriculum Unit

Program Development Branch

Lindsay Walker Desktop Publisher Production Support Unit

Program Development Branch

Bureau de l'éducation française Division Staff

Chantal BérardConsultantBureau de l'éducation françaisePaul SherwoodConsultantBureau de l'éducation françaiseNicole MasséCurriculum WriterBureau de l'éducation française

Jean-Vianney Auclair Director Bureau de l'éducation française