

Primary Programs Framework for Teaching and Learning (Kindergarten to Grade 3)

Guiding Principles

Key Learning Skills

Curriculum Integration

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(Kindergarten to Grade 3)

Guiding Principles

Central Ideas about Teaching and Learning

Three central ideas about teaching and learning have informed the development of the guiding principles for primary programs.

Teaching and learning processes are complex

Learning and teaching processes are complex, interconnected and occur in and outside of school. Students and teachers are learners who are simultaneously part of a number of interlinked groups and contexts that affect each other and society. The learning process involves active participation, innovation and creativity. It can transform all learners and, potentially, how they learn. The outcomes of the learning process cannot therefore be entirely predicted.

Diversity is a condition for and an outcome of learning

Individual learners bring a wide range of different experience, knowledge and skills to the learning process. Understanding of diversity is enhanced when learners actively participate in a variety of learning activities in a collaborative group process. Sharing knowledge, understanding and skills brings learning to a higher level than individuals can achieve on their own. Diversity is therefore a condition for learning as well as an outcome of learning.

Learning is making meaningful connections that lead to understanding

Learning is a complex process in which all aspects are connected together in a nonlinear, complex and dynamic way. Learners, based on their experiences, have diverse, culturally constructed understandings of the social and natural world. Recognizing the interrelationship between the learning process and students' personal understandings can help teachers guide students to make meaningful connections between the learning process and learning outcomes.

Guiding Principles for Primary Programs (Kindergarten to Grade 3)

Teaching and learning involves putting into action a system of beliefs that are culturally constructed. Culture rests at the heart of selfhood and determines ways of living and seeing the world. Culture is actions, artifacts and the ever-changing meanings given to and derived from the practices, beliefs and social interactions of a community of people. Teachers and students bring their unique and diverse cultural backgrounds to the learning environment.

The guiding principles for primary programs provide the philosophical and theoretical foundation for teaching and learning in the primary grades. They reflect current understandings and contemporary education research on young children, families, communities and schools.

The purpose of the guiding principles is to help Kindergarten to Grade 3 teachers reflect on the nature of young children and their learning to make informed instructional decisions and create learning environments that are responsive to children's diverse needs; capabilities; learning styles; dispositions and cultural, social and linguistic backgrounds.

In the guiding principles, children are viewed as diverse learners and active contributors within a variety of cultural and social contexts. Experiences within families and communities define the various pathways through which children learn in and outside of school. In response to these differences, schools can build on children's diverse prior knowledge and experience.

Principle 1: Childhoods differ depending on social and cultural circumstances

Childhood is one of life's stages. The developmental milestones of childhood are no longer thought to be universal and consistent across cultures. It is now recognized that explanations of child development, as well as expectations of developmental accomplishments, are socially constructed.

This sociocultural-historical view emphasizes that there are multiple ways of being a child. There is no universal childhood; rather, childhoods differ depending on the social and cultural circumstances in which children live.

Culture and society have a significant impact on the ways in which children develop and learn that expands thinking about teaching and learning in the primary grades.

Principle 2: Children’s development is influenced but not determined by their early experiences

Children’s early experiences influence social, physical, intellectual, creative, cultural and emotional development. Early childhood is the most active period of brain development although the brain continues to develop well beyond this time. Experience plays an important role in this development, with the nature of a child’s early experience having a long-term impact on learning outcomes.

There is not a direct cause-and-effect relationship between children’s individual experiences and their later development. Interaction between developmental areas either limits or supports the growth of contextual experience. Young learners need rich and varied opportunities to explore their environment; use language; engage with peers and interact with responsive adults at home, school and in their communities.

Principle 3: Children interact and learn in a variety of contexts

Learning also occurs in other environments than the home and school. Children gain significant experiences in a range of contexts that reflect and support varying social and cultural beliefs and values.

As members of different communities, children have diverse perspectives about events in their lives. Interaction within the context of these perspectives has a significant impact on the ways in which children form their identities as members of various cultural and social groups.

A close partnership between schools, families and communities can strengthen the connections between children’s learning and experiences, within these various contexts, and make them more meaningful. Children are more likely to be successful in negotiating transitions among the diverse environments in which they live if they are intellectually engaged and challenged, while feeling socially comfortable and safe.

Principle 4: Children are co-constructors of knowledge and partners in learning

Learning is a cooperative and communicative process. Children make sense of the world through interaction with teachers, family members, other children and community members. Through this interaction, children construct knowledge and make meaning of the world. As children extend their interests and prior understanding, they engage in problem solving, shared meaning making and construction of new knowledge. These understandings are greater than those they can construct alone.

Including others in the scaffolding of children's emerging knowledge is essential to help them achieve greater levels of understanding. Children are engaged as active participants as they build knowledge about themselves and the social and natural world. They reformulate ideas based on their intuitive knowledge as they internalize what they have learned in collaboration or in conflict with others.

Principle 5: Children are unique and active contributors to their learning

By the time children start school, they are already capable individuals who have been learning since birth. In school, they bring their unique prior learning experiences and their existing understandings, capabilities, attitudes and dispositions to the learning environment.

Children start school with common but varied experiences as learners because they have different cultural, social and linguistic identities. They have developed implicit knowledge and ideas about everyday events and the world around them.

These understandings create an experiential path that supports the development of the conceptual and procedural knowledge that provides organization to children's thinking processes. Teachers build on or reshape children's understandings to align with the outcomes of the program of studies.

Principle 6: Children construct and represent knowledge in a variety of ways

Children construct knowledge when their minds are actively engaged in meaningful, shared interactions with adults and peers in a range of social, cultural and linguistic contexts. This knowledge is collective, socially constructed and both enabled and constrained by language, history and traditions.

Language is central to identity and a defining feature of cultures. It is the basis of communication and one of the symbolic tools we use to create meaning. Language is dynamic, with meanings and structures that are constantly negotiated and modified through human interaction.

Thinking, learning and language are interrelated. Children use oral, written and visual language to:

- convey ideas, thoughts, feelings, values and beliefs
- learn to understand themselves and others
- reflect on their own thinking and learning processes.

Learning is not linear and all students do not follow the same learning path. Some children learn best visually, others by describing, some by questioning and others by observing. Encouraging children to use multiple forms of representation as they learn, solve problems, create and reflect allows for the construction of multiple meanings.

Principle 7: Children are citizens and active participants in school and society

Children are citizens in their own right and contribute to the social fabric of the classroom, the school and their communities.

Children should be active participants in shaping their identities as members of various cultural and social communities and as citizens of a pluralistic and democratic society. When children are in learning environments that recognize individual and collective rights, and foster personal and collective responsibility, they develop shared values and a sense of self and community.

Children should participate in democratic dialogue and decision making about their learning and the classroom environment. They should be heard and listen to others, critically assess their words and actions, and have the opportunity to participate fully in class and school activities.

Principle 8: Children are active collaborators in and users of assessment

Children's learning is enhanced when teachers engage in an ongoing process of gathering information about what is being learned and reflecting on the meaning of that information.

Assessment is effective in supporting and enhancing both teaching and learning. It is a cyclical process in which connections, relationships and new questions emerge as information is gathered and evaluated.

Self-assessment and feedback from peers, teachers and parents facilitate and guide children's reflections and take learning to a deeper level.

Learning is more purposeful and effective when children and teachers reflect and dialogue on ways children construct and represent knowledge and participate in the learning process. Helping children set goals, monitor their own learning and reflect on their progress empowers them to see themselves as competent and confident learners. If children participate in the definition of assessment criteria, they will know when they have succeeded and have more control over the completion of the task.

Bibliography

The sources in this bibliography have informed the conceptualization of ideas embedded in the guiding principles for primary programs. This bibliography is a representative list of key writings and each item has its own multiple connections to other sources of rich ideas. Readers of these sources can and should construct meaning, based on their own experiences, understanding and interests.

Ackers, L. and H. Stalford. *A Community for Children? Children, Citizenship and Internal Migration in the EU*. Aldershot, UK: Ashgate, 2004.

Alberta Assessment Consortium. *Refocus: Looking at Assessment for Learning*. Edmonton, AB: Alberta Assessment Consortium, 2003.

Alberta. Alberta Education. *Teaching Thinking, Enhancing Learning: A Resource Book for Schools ECS to Grade 12*. Edmonton, AB: Alberta Education, 1990.

Alberta. Alberta Learning. *Elementary Schools: Program of Studies*. Edmonton, AB: Alberta Learning, 2003.

_____. *Final Draft: A Discussion of Integrated Curriculum*. [Unpublished manuscript by Spectra Education], 2001.

_____. *Focus on Inquiry: A Teacher's Guide to Implementing Inquiry-based Learning*. Edmonton, AB: Alberta Learning, 2004.

_____. *Guide to Education, ECS to Grade 12*. Edmonton, AB: Alberta Learning, 2003.

Alberta. Alberta's Commission on Learning. *Every Child Learns. Every Child Succeeds: Report and Recommendations*. Edmonton, AB: Alberta Learning, 2003.

Almy, M. "The Past, Present and Future for the Early Childhood Education Researcher." *Early Childhood Research Quarterly* 1,1 (1986), pp. 1–13.

Ayers, W. *To Teach: The Journey of a Teacher*. 2nd ed. New York, NY: Teachers College Press, 2001.

Barkow, J., L. Cosmides and J. Tooby, eds. *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*. New York, NY: Oxford University Press, 1992.

- Berger P. and T. Luckmann. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York, NY: Doubleday, 1966.
- Bodrova, E. and D. Leong. *Tools of the Mind: The Vygotskian Approach to Early Childhood Education*. 2nd ed. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall, 2007.
- Brady, J. *Schooling Young Children: A Feminist Pedagogy for Liberatory Learning*. Albany, NY: State University of New York Press, 1995.
- Bredenkamp, S. "Reflections on Reggio Emilia." *Young Children* 49,1 (November 1993), pp. 13–17.
- Bronfenbrenner, U. *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press, 1979.
- Bruer, J. T. "In Search of...Brain-based Education." *Phi Delta Kappan* 80, 9 (May 1999), pp. 648–657.
- _____. *The Myth of the First Three Years: A New Understanding of Early Brain Development and Lifelong Learning*. New York, NY: Free Press, 1999.
- Bruner, J. S. *Beyond the Information Given: Studies in the Psychology of Knowing*. New York, NY: Norton, 1973.
- Burman, E. *Deconstructing Developmental Psychology*. London, UK: Routledge, 1994.
- _____. "Developmental Psychology and Its Discontents." In D. Fox and I. Prilleltensky (eds.), *Critical Psychology: An Introduction* (Thousand Oaks, CA: Sage, 1977), pp. 134–149.
- Cannella, G. *Deconstructing Early Childhood Education: Social Justice and Revolution*. New York, NY: Peter Lang, 1997.
- _____. "Early Childhood Education: A Call for the Construction of Revolutionary Images." In W. Pinar (ed.), *Curriculum: Toward New Identities* (New York, NY: Garland, 1998), pp. 157–184.
- Cannella, G. and R. Viruru. *Childhood and Postcolonization: Power, Education, and Contemporary Practice*. New York, NY: RoutledgeFalmer, 2004.
- Carr, M. *Assessment in Early Childhood Settings: Learning Stories*. Thousand Oaks, CA: Paul Chapman, 2001.

- Christian, K., H. J. Bachnan and F. J. Morrison. "Schooling and Cognitive Development." In R. J. Sternberg and E. L. Grigorenko (eds.), *Environmental Effects on Cognitive Abilities* (Mahwah, NJ: Lawrence Erlbaum, 2001), pp. 287–335.
- Chung, S. and D. J. Walsh. "Unpacking Child-centredness: A History of Meanings." *Journal of Curriculum Studies* 32, 2 (2000), pp. 215–234.
- Cochran, M. "Public Child Care, Culture, and Society: Crosscutting Themes." In M. Cochran (ed.), *International Handbook of Child Care Policies and Programs* (Westport, CT: Greenwood Press, 1993), pp. 627–658.
- Cole, M. "Culture in Development." In M. H. Bornstein and M. E. Lamb (eds.), *Developmental Psychology: An Advanced Textbook*. 3rd ed. (Hillsdale, NJ: Lawrence Erlbaum, 1992), pp. 731–789.
- Cosmides, L. and J. Tooby. "From Evolution to Behavior: Evolutionary Psychology as the Missing link." In J. Dupre (ed.), *The Latest and the Best: Essays on Evolution and Optimality* (Cambridge, MA: MIT Press, 1987), pp. 227–306.
- Costa, A. L. and B. Kallick, eds. *Assessing and Reporting on Habits of Mind*. Alexandria, VA: Association for Supervision and Curriculum Development, 2000.
- _____. *Habits of Mind: A Developmental Series*. Alexandria, VA: Association for Supervision and Curriculum Development, 2000.
- Davis, B. and D. Sumara. "Curriculum Forms: On the Assumed Shapes of Knowing and Knowledge." *Journal of Curriculum Studies* 32, 6 (November 2000), pp. 821–845.
- Davis, B., D. Sumara and R. Luce-Kapler. *Engaging Minds: Learning and Teaching in a Complex World*. Mahwah, NJ: Lawrence Erlbaum Associates, 2000.
- Derman-Sparks, L. and P. G. Ramsey. *What if All the Kids Are White? Anti-bias Multicultural Education with Young Children and Families*. New York, NY: Teachers College Press, 2006.
- Dewey, J. *The Child and the Curriculum and the School and Society*. Chicago, IL: University of Chicago Press, 1956.
- Edmonton Public Schools. *Critical Learnings*. Edmonton, AB: Edmonton Public Schools, 1999.

- Eisner, E. W. *Cognition and Curriculum Reconsidered*. 2nd ed. New York, NY: Teachers College Press, 1994.
- Feuerstein, R. and S. Feuerstein. "Mediated Learning Experiences: A Theoretical Review." In R. Feuerstein, P. Klein and A. Tannenbaum (eds.), *Mediated Learning Experience (MLE): Theoretical, Psychosocial and Learning Implications* (London: Freund Publishing House, 1991), pp. 3–51.
- Forman, G. "Different Media, Different Languages." In L. G. Katz and B. Cesarone (eds.), *Reflections on the Reggio Emilia Approach* (Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education (EECE), 1994), pp. 41–53.
- Fromberg, D. P. "The Intuitive Mind and Early Childhood Education: Connections with Chaos Theory, Script Theory, and Theory of Mind." In B. Torff and R. J. Sternberg (eds.), *Understanding and Teaching the Intuitive Mind: Student and Teacher Learning* (Mahwah, NJ: Lawrence Erlbaum Associates, 2001), pp. 93–115.
- Gardner, H. *Frames of Mind: The Theory of Multiple Intelligences*. New York, NY: Basic Books, 1983.
- Goldstein, S. and R. B. Brooks. "Why Study Resilience?" In S. Goldstein and R. B. Brooks (eds.), *Handbook of Resilience in Children* (New York, NY: Kluwer Academic/Plenum, 2005), pp. 3–16.
- Greene, M. *Teacher as Stranger: Educational Philosophy for the Modern Age*. Belmont, CA: Wadsworth, 1973.
- Harkness, S. "Cross-cultural Research in Child Development: A Sample of the State of the Art." *Developmental Psychology* 28, 4 (July 1999), pp. 622–625.
- Harkness, S., C. Raeff and C. M. Super, eds. *Variability in the Social Construction of the Child: New Directions for Child and Adolescent Development, No. 87*. San Francisco, CA: Jossey-Bass, 2000.
- Hatch, J. A. *Teaching in the New Kindergarten*. Clifton Park, NY: Thomson Delmar Learning, 2005.
- Hill, L. T., A. J. Stremmel and V. R. Fu. *Teaching as Inquiry: Rethinking Curriculum in Early Childhood Education*. Boston, MA: Pearson, 2005.

- James, A. "Understanding Childhood from an Interdisciplinary Perspective: Problems and Potentials." In P. B. Pufall and R. P. Unsworth (eds.), *Rethinking Childhood* (New Brunswick, NJ: Rutgers University Press, 2004), pp. 25–37.
- James, A. and A. Prout, eds. *Constructing and Reconstructing Childhood: Contemporary Issues in the Sociological Study of Childhood*. London, UK: Falmer, 1990.
- James, A., C. Jenks and A. Prout. *Theorizing Childhood*. New York, NY: Teachers College Press, 1998.
- Jipson, J. "Developmentally Appropriate Practice: Culture, Curriculum, Connections." *Early Education and Development* 2, 2 (1991), pp. 120–136.
- Kilderry, A. "Critical Pedagogy: A Useful Framework for Thinking about Early Childhood Curriculum." *Australian Journal of Early Childhood* 29, 4 (December 2004), pp. 33–37.
- Kuschner, D. "The Dangerously Radical Concept of Free Play." In S. Reifel and M. H. Brown (eds.), *Early Education and Care, and Reconceptualizing Play*. Advances in Early Education and Day Care Series, Vol. II. Oxford, UK: JAI, 2001), pp. 275–295.
- Lake, K, "Close Up #16: Integrated Curriculum." *Northwest Regional Educational Laboratory (NWREL) School Improvement Research Series*. August 31, 2001. <http://www.nwrel.org/scpd/sirs/8/c016.html> (Accessed May 29, 2007).
- Lather, P. *Getting Smart: Feminist Research and Pedagogy with/in the Postmodern*. London, UK: Routledge, 1991.
- Lave, J. and E. Wenger. *Situated Learning: Legitimate Peripheral Participation*. Cambridge, UK: Cambridge University Press, 1990.
- MacNaughton, G. *Doing Foucault in Early Childhood Studies: Applying Poststructural Ideas*. London, UK: Routledge, 2005.
- _____. *Shaping Early Childhood: Learners, Curriculum and Contexts*. Maidenhead, UK: Open University Press, 2003.
- MacNaughton, G. and G. Williams. *Teaching Young Children: Choices in Theory and Practice*. Maidenhead, UK: Open University, 2004.

- Malaguzzi, L. "A Charter of Rights." In *Reggio Children, A Journey into the Rights of Children: As Seen by Children Themselves* (Reggio Emilia, Italy: REGGIO CHILDREN, 1993), pp.67–69).
- _____. "For an Education Based on Relationships." *Young Children* 49, 1 (November 1993), pp. 9–12.
- _____. "Your Image of the Child: Where Teaching Begins." *Child Care Information Exchange* 96 (1994), pp. 52–61.
- _____. "History, Ideas, and Basic Philosophy: An Interview with Lella Gandini." In C. Edwards, L. Gandini and G. Forman (eds.), *The Hundred Languages of Children: The Reggio Emilia Approach – Advanced Reflections*. 2nd ed. (Greenwich, CT: Ablex, 1998), pp. 49–99.
- Manitoba. Manitoba Education, Training and Youth. *Curricular Connections: Elements of Integration in the Classroom*. Winnipeg, MB: Manitoba Education, Training and Youth, 1997.
- Marzano, R. J. and D. J. Pickering. *Dimensions of Learning: Teacher's Manual*. Aurora, CO: Mid-continent Regional Educational Laboratory, 1997.
- Mead, G. H. *Mind, Self, and Society: From the Standpoint of a Social Behaviorist*. Chicago, IL: University of Chicago Press, 1934.
- Morss, J. R. *The Biologising of Childhood: Developmental Psychology and the Darwinian Myth*. Hillsdale, NJ: Erlbaum, 1990.
- Mustard, J. F. "Early Childhood Development and the Brain: The Base for Health, Learning and Behavior throughout Life." In M. E. Young (ed.), *From Early Child Development to Human Development: Investing in Our Children's Future* (Washington, DC: The World Bank, 2002), pp. 23–61.
- Nørretranders, T. *The User Illusion: Cutting Consciousness Down to Size*. New York, NY: Viking, 1998.
- Office of the United Nations High Commissioner for Human Rights. *Convention on the Rights of the Child*. 1989.
<http://www.unhchr.ch/html/menu3/b/k2crc.htm> (Accessed May 29, 2007).

- Patrick, H. and P. R. Pintrich. "Conceptual Change in Teachers' Intuitive Conceptions of Learning, Motivation, and Instruction: The Role of Motivational and Epistemological Beliefs." In B. Torff and R. Sternberg (eds.), *Understanding and Teaching the Intuitive Mind: Student and Teacher Learning* (Mahwah, NJ: Lawrence Erlbaum Associates, 2001), pp. 117–145.
- Petersen, E. A. *A Practical Guide to Early Childhood Curriculum: Linking Thematic, Emergent, and Skill-based Planning to Children's Outcomes*. 2nd ed. Boston, MA: Allyn and Bacon, 2003.
- Pufall, P. B. and R. P. Unsworth "Introduction: The Imperative and the Process for Rethinking Childhood." In P. B. Pufall and R. P. Unsworth (eds.), *Rethinking Childhood* (New Brunswick, NJ: Rutgers University Press, 2004), pp. 1–24.
- Reber, A. S. *Implicit Learning and Tacit Knowledge: An Essay on the Cognitive Unconscious*. New York, NY: Oxford University Press, 1993.
- Rinaldi, C. "Projected Curriculum Constructed through Documentation—Progettazione: An Interview with Lella Gandini." In C. Edwards, L. Gandini and G. Forman (eds.), *The Hundred Languages of Children: The Reggio Emilia Approach – Advanced Reflections*. 2nd ed. (Greenwich, CT: Ablex, 1998), pp. 113–127.
- Rogoff, B. *The Cultural Nature of Human Development*. New York, NY: Oxford University Press, 2003.
- Rogoff, B., M. Gauvain and S. Ellis. "Development Viewed in Its Cultural Context." In P. Light, S. Sheldon and M. Woodhead (eds.), *Learning to Think. Child Development in Social Context, Vol. 2* (New York, NY: Routledge, 1991), pp. 292–339.
- Saskatchewan. Saskatchewan Education. *Understanding the Common Essential Learnings: A Handbook for Teachers*. 1988.
<http://www.sasked.gov.sk.ca/docs/policy/cels/index.html> (Accessed May 29, 2007).
- Shonkoff, J. P. and D. A. Phillips, eds. *From Neurons to Neighborhoods: The Science of Early Child Development*. Washington, DC: National Academy Press, 2000.
- Shore, R. *Rethinking the Brain: New Insights into Early Development*. New York, NY: Families & Work Institute, 1997.

- Siegel, D. J. *The Developing Mind: Toward a Neurobiology of Interpersonal Experience*. New York, NY: The Guilford Press, 1999.
- Sigel, I. E. "Developmental Theory and Preschool Education: Issues, Problems, and Implications." In I. J. Gordon (ed.), *Early Childhood Education: The Seventy-first Yearbook of the National Society for the Study of Education* (Chicago, IL: University of Chicago Press, 1972), pp. 13–31.
- State of Queensland. Department of Education, Training and the Arts. *New Basics Project: The New Basics Curriculum Organisers*. 2004. <http://education.qld.gov.au/corporate/newbasics/html/curric-org/curricorg.html> (Accessed May 29, 2007).
- Sternberg, R. J. "Abilities are Forms of Developing Expertise." *Educational Researcher* 27, 3 (1998), pp. 11–20.
- Sternberg, R. J. et al. "Testing Common Sense." *American Psychologist* 50, 11 (November 1995), pp. 912–927.
- Sternberg, R. J. and J. A. Horvath, eds. *Tacit Knowledge in Professional Practice: Researcher and Practitioner Perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates, 1999.
- Super, C. M. and S. Harkness. "The Cultural Structuring of Child Development." In J. W. Berry, P. R. Dasen and T. S. Saraswathi (eds.), *Handbook of Cross-cultural Psychology (Vol. 2): Basic Processes and Human Development*. 2nd ed. (Needham Heights, MA: Allyn & Bacon, 1997), pp. 1–39.
- Tooby, J. and L. Cosmides. "On the Universality of Human Nature and the Uniqueness of the Individual: The Role of Genetics and Adaptation." *Journal of Personality* 58, 1 (March 1990), pp. 17–67.
- Torff, B. and R. J. Sternberg, eds. *Understanding and Teaching the Intuitive Mind: Student and Teacher Learning*. Mahwah, NJ: Lawrence Erlbaum Associates, 2001.
- Vygotsky, L. S. *Mind and Society: The Development of Higher Psychological Processes*. Edited and translated by M. Cole, V. John-Steiner, S. Scribner and E. Souberman. Cambridge, MA: Harvard University Press, 1978.
- _____. *Thought and Language*. Translated by A. Kozulin. Cambridge, MA: Massachusetts Institute of Technology Press, 1986.

Wagner, C., ed. *A Resource Guide to Public School Early Childhood Programs*. Alexandria, VA: Association for Supervision and Curriculum Development, 1988.

Wood, D., J. S. Bruner and S. Ross. "The Role of Tutoring in Problem Solving." *Journal of Child Psychology and Psychiatry* 17, 2 (1976), pp. 89–100.

