Henry." The eve of St John the Baptist is 23 June (Midsummer's Eve) and the 27th year of Edward I's reign is 1299. Between the various possible ways of recording the year, month and day the commonest procedure adopted in England was to relate the day within each year to a feast of the church and to express the year in terms of regnal years. This compromise between church and state, which rejected years Anno Domini (as used in episcopal chanceries), and Roman calendar months (as used in the royal Chancery) probably seemed the most appropriate to knightly landowners. They trusted regnal years more than years Anno Domini because there was a more immediate point of reference in the king's coronation, which was a publicly remembered event. The growth of dating by regnal years, rather than by more personal events or by the regimes of lesser lords, also suggests that the king was becoming accepted as the head of the English community. Some knights were beginning, moreover, to learn the lengths of reigns of their kings from illustrated rolls which set them out in succession.

Although after 1300 many private charters still bear no date, forms of dating had become firmly established and commonplace. In general, after much preliminary hesitation, writers had got the measure of time. But because dating had evolved at the slow pace at which literate habits became acceptable, rather than being arbitrarily imposed by Roman law, English methods of dating documents remained complex and inconsistent. From a historical point of view, this variety of methods is a memorial to the formation of literate habits reflecting both feudal and Christian ways of thought. The evolution of the dating of documents is a measure of growing confidence in their usefulness as records.

# 10. Defining "Literacy" in North American Schools

## Social and Historical Conditions and Consequences

Suzanne de Castell Allan Luke

eing "literate" has always referred to having mastery over the processes by means of which culturally significant information is coded. The criterion of significance has varied historically with changes in the kind of information from which power and authority could be derived. Educational attempts to redefine literacy, however, have not always faithfully reflected this fact. Studies of literacy in the more distant past (Havelock, 1 Hoggart2 and Graff3), have emphasized relationships of literacy to evolving modes of social and political organization, yet contemporary educators and researchers have been reluctant to analyse literacy in terms of explicitly normative or ideological conditions. The redefinition of the processes of literacy instruction by educational psychologists in recent years has effectively concealed the necessity for addressing both the subjective and the social dimensions of literacy development. This encourages a view of literacy as a context-neutral, content-free, skill-specific competence which can be imparted to children with almost scientific precision. Literacy so seen bypasses controversial claims about what curriculum is worthwhile, what moral, social and personal principles should operate within the educational context. This, as we can see historically, has never been the case. And as we can come to see conceptually, it never will be the case.

Literacy instruction has always taken place within a substantive context of values. In the European Protestant educational tradition on which the public schools of the New World were first based, commonality of religious belief was

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central to literacy instruction. The "criss-cross row" - the first line of the earliest 17th-century English reader, the Horn Book-was a graphic representation of the Cross, invoked to speed and guide the beginner's progress through the text. The expansion of literacy in Europe was initially inseparable from the rise of Protestantism, and the erosion of the Church's monopoly over the printed word (Eisenstein<sup>5</sup> and Chaytor<sup>6</sup>). The intent of the sixteenth- and seventeenth-century educational reformers was that "whosoever will" should have access to the word of God. It was believed that individual access to the word, even though it might involve uncomprehending repetition, would improve the soul of the reader without authoritative meditation by the cleric. This explains in part the importance ascribed in European schools to repetition and recitation of texts which children could not have been expected to "comprehend"-a religious and pedagogical tradition inherited by North American education in its earliest days. Aspects of that same tradition carried over into nineteenth-century 3Rs and classical literacy instruction, which augmented religious texts with venerable children's tales and literature. During the period of progressive reform, from 1900 to just after the Second World War, literacy instruction attempted to address the "practical" speech codes of everyday life. "Child-centred" curricula usurped the classics, and the normative stress moved from moral and cultural edification to socialization and civic ethics. After a neo-classical revival in the 1950s, the technocratic paradigm emerged, with a bias towards "functional skills" and the universal attainment of "minimum competence." As the touchstone of educational excellence moved from text to interaction to evaluation, what counted as literacy was systematically redefined (see table 10.1).

#### Classical and 3Rs Instruction

Long before the public schools movement in the 1860s, North American children received "3Rs" (reading, writing and arithmetic) in private and community schools. For the "common" child, literacy instruction took place in the home, at church, in the local shops, and in the few charity schools. Most communities had one-room schools where a teacher would provide the 3Rs, and moral and religious instruction to those children of various ages whose labour was not required by the family. In the elite private and preparatory schools of the mid-nineteenth century, like Boston's Roxbury Latin School (founded in 1645). children of the wealthy and influential studied "Latin for six years, French for five, German for four, and Greek for three."7 Despite this differential provision of linguistic competence and cultural knowledge according to class status and geographic location, the blend of formal and informal schooling, family and religious education, and apprenticeship was nevertheless largely successful in creating a literate populus. In Upper Canada this loosely organized system "produced a basic literacy for a majority of students." Of the mid-century US, Bowles and Gintis note that "it is particularly difficult to make the case that the objective of early school reform movements was mass literacy. In the U.S., literacy was already high (about 90 percent of adult whites) prior to the 'common school revival," "9 Whether there was a pressing economic need for a literate

Table 10.1

Theory into practice	Classical	Progressive		Technocratic
Philosophy	Cultivation of the 'civilized' person with the 'instinct' of a gentleman	Education as 'growth' the natural 'unfolding' of the child		Education as effective perfor- mance, behaviour modification
Psychology	Plato: Faculty psychology—reason, will, emotion. Learning by imitation. Reason must subdue the passions	Dewey: The mind as unfolding organism, social theory of mind (organism/environment)	Thorndike: Empiricism, testing	Skinner: The mind as mechanism, learning through reinforcement (behaviour modification)
Sociology	Aristocracy	Democracy		Individualism/pluralism
Conception of literacy	Literacy as literature, detailed analysis of exemplary texts, specification or precise rules, principles, explicit attention to rhetorical appropriateness	Literacy as self-expression, communication as social interaction	3	Functional literacy 'survival skills,' minimum competence
Attitude to education	Intrinsic worth	Subjective/social significance		Instrumental value
Curriculum	Exemplary texts (1) the Bible. (2) the Classics., (3) the English literature greats, (4) North American classics, grammar texts, handwriting, spelling, pronunciation	'Adventure' stories, civics, self- generated text, idiom of ordinary language'		De-contextualized subskills of lit- erate competence. Systematic programmed instruction guided by behavioural objectives
Pedagogy	Rote-learning: oral recitation, copying, imitation of correct speech and writing, direct instruction	Projects: 'experiential' education, teacher/pupil interaction, teacher as guide,' discovery' method. Socialized instruction	Vocational	Streaming or 'mastery learning of common set of objectives. Learning 'packages' with teacher as (preprogrammed) facilitator. Programmed instruction
Evaluation	Connoisseurship model; oration, oral reading, direct questioning	Local, classroom texts, written tests stressed over oration, products (or 'projects'), social skills stressed		Meeting behavioural objectives. Objective standardized testing (mass scale)
Outcome	Domestication	Socialization		Individuation/commoditization

populus at the time is problematic. Graff notes that most mid-nineteenthcentury occupations required a minimal competence with print; far from requiring universal literacy, communities typically featured a division of literate labour.

Whatever the concrete practical demands for literacy, the popular association of illiteracy with crime, poverty, and immorality fuelled public enthusiasm for a universal free public education system. Ontario educator Archibald McCallum's comments reflected the popular conception of the consequences of illiteracy:

Over seven percent of New England's population over ten years of age can neither read nor write; yet 80 percent of the crime in these states was committed by this small minority; in other words, an uneducated person commits fifty-six times as many crimes as one with education. 10

The debate over illiteracy in nineteenth-century North America, then, was intimately connected with religious, ethical, and ultimately ideological questions. We find evidence of this in the theory and practice of 3Rs and classical instruction largely borrowed from existing European and British methods and texts. An overriding instructional emphasis on mental and physical discipline complemented perfectly mid-century educational goals: the domestication of a "barbarous" population, whose inclinations towards "materialism" and "ignorance" threatened cultural continuity, political order, and Protestant morality.

Universal free public school systems had been established in the majority of states and in Upper Canada by 1860. In the US over half of the nation's children were receiving formal education, and more students than ever before now had access to levels of schooling previously restricted to an élite few. 11 In Canada, under the direction of Egerton Ryerson, the Ontario Schools Act of 1841 had subsidized the existing common school system; by 1872 British Columbia had legislated a public school system modelled on that of Ontario.

Late nineteenth-century literacy instruction in Canada differed in one crucial respect from its American counterpart. For while Canadian schools imported curricula from England, teachers in America were provided with locally developed textbooks, in the tradition of the McGuffey Readers. Noah Webster's American Spelling Book (1873),12 the most widely used textbook in US history, promoted not only American history, geography and morals, but was itself a model for an indigenous vocabulary and spelling. Textbooks and dictionaries of this period attempted to engender a national literacy and literature free, in Webster's words, of European "folly, corruption and tyranny." In Canada, by contrast, classrooms featured the icons of colonialism; British flags and pictures of royalty adorned the walls, younger students were initiated to print via the Irish Readers, and literature texts opened with Wordsworth's and Tennyson's panegyrics to the Crown. In Canada, the reduction of pauperism and crime associated with illiteracy was seen to require the preservation of British culture and a colonial sensibility; in the United States, "custodians of culture"13 sought to assure economic independence and political participation. The match between these differing societal and educational ideologies, and the "civilizing" effects of traditional 3Rs and classical education was near perfect.

The model for this classical education was found in the philosophy, psychology, and social theory of Plato's educational treatise The Republic. Platonic faculty psychology subdivided the mind into three faculties: reason, will and emotion. The child, a "barbarian at the gates of civilization" 14 was regarded as a bundle of unruly impulses needing to be brought under the control of the faculty of "right reason," that is, morally informed rational judgement. Paraphrasing a speech of Ryerson's, the Journal of Education declared in 1860 that "a sensual man is a mere animal. Sensuality is the greatest enemy of all human progress" (in Prentice, p. 29). To that end, rigid discipline and rigorous mental training characterized classical instruction.

Adopting Plato's stress on mimesis and imitation as the basis for the development of mind, classical pedagogy stressed rote-learning, repetition, drill, copying, and memorization of lengthy passages of poetry and prose. Mental, moral and spiritual edification were to be had through exposure to, in the words of Matthew Arnold (1864), the "best that has been thought and said in the world." Accordingly, the intermediate and secondary grades adopted a "great books" literacy curriculum which featured the Bible, Greek and Roman classics and, after some debate, acknowledged works of English and American literature; "far more time [was] spent . . . on ancient history and dead languages than upon the affairs of the present or even recent past" (Ioncich, p. 48). In the US, public high schools retained a modified classical curriculum, sans Greek, as a "uniform program." This universal implementation of a classical curriculum in secondary schools forced practical studies of law, book-keeping, and vocational skills outside the public system. In Canada, it was left to industry to initiate vocational education. 15

Curricular material did not vary from grade to grade: the same literary texts, particularly the Bible, were studied in greater and greater detail and depth; underlying "truths" were explicated in terms of grammatical rules, rhetorical strategies, moral content, and aesthetic worth. In the elementary grades, students copied passages for "finger style" penmanship exercise, in preparation for advanced composition study. Thus, stylistic imitation and repetition, guided by explicit rules, dominated writing instruction; students at all levels undertook précis and recitation of exemplary texts.

Following the European model, reading took the form of oral performance to an audience. Individual reading time was limited and all students progressed at a fixed rate through the text. Both in graded and secondary schools, each student in turn would read passages aloud; those not reading were expected to listen attentively to the reader, since the intent of oral reading instruction was not merely to ascertain the reader's ability to decode the text, but to develop powers of effective public oration. Pronunciation, modulation, and clarity of diction were stressed. In the nineteenth-century classroom, reading was neither a private nor reflective act, but a rule-bound public performance.

While texts were meticulously dissected and analysed, and block parsing was a daily routine, the emphasis was not on mere grammatical correctness. In theory, analysis and repetition subserved the development of sensitivity to the aesthetic and didactic features of the text. Thus, the student's encounter with the text, from fairy-tales and Shakespeare, was to be both aesthetically pleasing and morally instructive—in accordance with the Horatian edict that literature should be "dulce et utile."

In the same way, vocabulary study subserved the ends of moral and literary education. Spelling lists often featured poetic language, Biblical and literary terminology. Precision of meaning and rhetorical effectiveness were to be achieved through the apt selection of words from this cultural lexicon: the range of vocabulary legitimated by "literati" as appropriate for each generic form of literate expression. The overriding sense of conformity and decorum was reflected in the rules which constrained classroom discourse and behaviour. Corresponding to each literate act was a correct bodily "habitus";16 reading, writing and speaking were performed in prescribed physical postures. Moreover, "provincial" speech codes were frowned upon as evidence of rudeness or ignorance: textbooks of this period advised students to cultivate the friendship of children of higher station, so that they might assimilate more cultured and aristocratic speech habits.

At the secondary and college levels, unreflective and mechanical imitation was despised as the mark of an ill-bred social climber. Oration was the epitome of classical literate expression, for in the performance all of the diverse rules governing textual analysis and production could be organically unified. The truly successful high school student displayed not only a knowledge of rulefollowing, but of skilled and effective rule-breaking, which may have been, in the final analysis, what elevated performance from mere technique to the level of art. Implicit was an eighteenth-century ideal of "wit," following Addison (1714), that "there is sometimes a greater judgement shown in deviating from the rules of art than in adhering to them."

But if technical correctness was not a sufficient criterion of educational success beyond the grade school level, how could the attainment of classical literacy be evaluated? Evaluation in the 3Rs and classical classroom was carried out on a "connoisseurship" model. Under the oratorical model of formal examination, the examiner embodied, however tacitly, standards of cultural and disciplinary excellence and applied these unstated criteria to laud or correct the performance, often undertaken in the presence of trustees, clergy and parents. This system of assessment vested total control over evaluative criteria and procedures with the teacher or examiners, who retained the authoritative and final "word" in literacy instruction.

This view of knowledge was encouraged by an historically and critically specific ontology: the idealist conviction that knowledge was immutable, that forms of beauty, truth and morality were embodied, so far as they could be realized in the phenomenal world at all, in those authoritative texts passed down by each generation of élite literati. The experience of becoming literate was to be an initiation into a continuing cultural conversation with exemplary texts and human models.

The principal intent of nineteenth-century literacy instruction, then, was inextricably bound to the transmission of a national ideology and culture. In practice, this translated into a regimen of "benumbing" 17 drill, repetition, and physical constraint. This mode of literacy instruction meant to provide a universal sense of physical, legal, and moral discipline for a growing, diverse, and increasingly mobile populus while simultaneously ensuring that neo-British "high culture" would be preserved in North America well into the next century. For late nineteenth- and early twentieth-century students-even those 80 to 90 percent who left school by age 13-it would have been impossible to conceive of reading and writing as entities, or "skills," distinct from codes of conduct, social values and cultural knowledge.

#### Socializing the Recitation

Between 1900 and 1914, the number of public high schools in America doubled, and the student population increased by 150 percent. With increasing immigration and regional migration to urban centres, the provision and enforcement of compulsory education expanded; educational costs spiralled and per capita expenditure in the US rose from \$24 in 1910 to \$90 in 1930.18 With the largest part of these costs shouldered by local taxpayers, the fact that in the early 1900s only about 15 percent of students continued beyond elementary school led to public complaints that schools were élitist, authoritarian, outmoded and inefficient. E. P. Cubberley, Stanford University's advocate of modern management, noted in 1913 that Portland schools had become a "rigidly" prescribed mechanical system, poorly adapted to the needs of the children of the community. 19

Like their private school predecessors, late nineteenth- and early twentieth-century public high schools continued to exclude those students unwilling or unable to demonstrate excellence at the "civilizing" activities of recitation and literary study. And what use were these competencies anyway? The legitimation potential of classical literacy in a developing industrial democracy was rapidly eroded as the public was nurtured on scientific ideals and evolutionary theory by intellectuals of the day, and on scientific management and cost-accounting by its leading businessmen. And although these two influential groups expressed divergent views about what should be done, they were united in opposition to 3Rs and classical instruction.

The material stimulus for reform came from the application of business methods to schools. Educational administrators were called upon to produce results consistent in the public mind with the increasing tax burdens they were compelled to shoulder. The stage was set by the application of F. W. Taylor's, 20 and later I. F. Bobbitt's21 work on "cost-eficient scientific management" to school administration, curriculum, and instruction. Accordingly, measures of costs per minute of instruction in each subject area were used to adjudicate educational value. Finding that 5.0 recitations in Greek were equivalent to 23.8 recitations in French, F. Spalding (1913) declared:

Greater wisdom in these assignments will come, not by reference to any supposedly fixed and inherent values in these subjects, but from a study of local conditions and needs. I know of nothing about the absolute value of a recitation in Greek . . . the price must go down, or we shall invest in something else (Callahan).

Extensive building programmes were initiated, curricula were standardized,

class size was increased, teaching hours were extended; testing of teacher, pupil, and administrator was introduced, and records and documents were collected to evaluate everything and anything pertaining to schools. With a supply-anddemand mentality, and a cost-benefit analysis, schools were seen as "factories in which raw materials are to be shaped and fashioned into products to meet the various demands of life" (Cubberley in Callahan).

But the fact that it was traditional pupil recitations that "educational experts" were quantifying illustrates the impoverishment of their ideas on instructional reform. Beyond the belief that schools were maintained by and for business and public interests, administrative efficiency experts had little of substance to offer teachers. With the failure of platoon schools in the late 1920s, unmanageably large classes, and organized teacher resistance to "industrialization." the stage was set for a new educational philosophy, one which would accommodate both scientific management and democratic individualism.

What Plato was for the classicists, John Dewey was for the progressives. Dewey articulated a philosophy of education which drew from experimental science, child psychology, evolutionary theory, and the moral aspects of American pragmatism. Adopting William James's22 critique of innatism, and his call for early training in an optimal environment, Dewey saw educational reform as the principal means for American social evolution. Deweyan progressivism, therefore, originated as a self-conscious attempt to make schooling socially responsive: oriented towards a social future rather than a cultural past. Its goal was to provide the skills, knowledge, and social attitudes required for urbanized commercial and industrial society.

Progressives derived their definition of literacy from the social psychology of James and G. H. Mead. 23 Language, for Mead, was created and sustained by the pragmatics of intersubjective communication—communicative "acts" involving "symbolic interaction" with a "generalized social other." Within the pragmatists' expanded theory of communication, linguistic development and socialization were deemed inseparable. Hence, the classroom was to be a microcosm of the ideal social community, one which fostered the development of equality and social exchange, rather than authority and imitation. Teachers of the 1920s and 1930s were trained to view their classrooms as "learning environments": within these democratic communities, children could "act out" the skills required for social and vocational life. Said Dewey:

The key to the present educational situation lies in the gradual reconstruction of school materials and methods so as to utilize various forms of occupation typifying social callings, and to bring out their intellectual and moral content. This reconstruction must relegate purely literary methods—including textbooks—and dialectical methods to the position of necessary auxiliary tools in cumulative activities.24

The "integrated curriculum," "learning by discovery," and the "project method" were to enable the natural unfolding of the child in accordance with his/ her developing interests.

Rote recitation of literature was replaced in this reconstructed environ-

ment. Dewey noted that conventional reading instruction "may develop book worms, children who read omnivorously, but at the expense of development of social and executive abilities and skills."25 Thus, whereas classical literacy was grounded in the exemplary text, progressives focused on questions of instructional method and social use.

Nonetheless, the progressive mandate that education be socially useful, that training "transfer" across contexts, 26 made the content of literacy texts a crucial matter, albeit secondary to instructional concerns. Beginning in the 1910s and 1920s, American-prescribed and authorized readers, also used in Canada, reflected the dominant values and popular culture of commercial and industrial life. Stories of "adventure" and "friendship" featured vignettes of family life, work and play, and encouraged community service and individual achievement. Dick and Jane usurped Arthurian heroes; by the 1930s discussions of the latest "moving pictures" and radio programmes coexisted in secondary classrooms with the study of Shakespeare. Literacy texts portrayed a vision of a harmonious American social community, blessed with the gifts of technological advancement and material prosperity.

Progressive speaking and writing instruction placed an emphasis on practicality and expressiveness, rather than propriety. Students were encouraged to talk about their daily "experiences," to discuss emotional and contentious matters; colloquialism and regional dialects were more readily accepted, and practical "plain speaking" encouraged. In "creative writing" instruction students were expected to express their own ideas and experiences, rather than to reproduce literary style. Courses in "Business English" and journalism were introduced and grammar study became "functional" rather than "formal." Students learned library techniques and book reviewing, how to record the minutes of a meeting, and how to write laboratory reports.

This stress on the cultivation of practical linguistic expression was matched by a virtual reinvention of reading. Dewey's call for a more scientific method of instruction was answered by the developments in educational psychology. Influential studies by E. B. Huev, 27 E. L. Thorndike, 28 and W. S. Grav<sup>29</sup> indicated that oral reading instruction was inefficient and counterproductive. Thorndike proposed that:

In school practice it appears likely that exercises in silent reading to find answers to given questions, or to give a summary of the matter read, or to list the questions which it answers, should in large measure replace oral reading (p. 324).

Reading, then, was a form of "reasoning"; the psychologists convincingly argued that oral decoding and memorization did not engender an understanding or "comprehension" of textual meaning.

Accordingly, classroom reading instruction was reformulated; students read silently and responded to "objective" comprehension questions. Within this new system, the teacher would be freer to attend to individual remediation, small-group projects, grading and classroom management, while each student progressed through the text at an "individualized" rate. However, many teachers were burdened with far larger classes as pedagogical reforms remained subservient to industrial reorganization. A "child-centred" instruction which attended to "individual differences" was more often a theoretical rationale than practical reality.

Throughout North America, school and public libraries flourished under both government and corporate financing; as a result, the classical school master's monopoly over the selection and use of the text was diminished. Students were encouraged to undertake popular and technical works "outside of what is conventionally termed good reading matter" (Dewey, p. 549): "dime-store" novels, magazines and newspapers, "how-to" books, and biographies of contemporary sports and political heroes. The curricular provision for "recreational" and "work reading" instruction was a sign of the attempt to integrate schooled literacy with all aspects of home and work life.

Oral examinations of reading were replaced with standardized and, hence, allegedly equitable, instruments of student assessment and teacher accountability. Standardized tests, like the Thorndike-McCall Silent Reading Test, were efficient and time-saving pedagogical devices and, moreover, provided valuable data which could be used to determine instructional efficiency and individual progress. It is significant that these first psychometric measures of literacy, early reading and language achievement tests, were welcomed by educators as objective and neutral devices which would end the nepotistic and arbitrary evaluative criteria of the connoisseurship model.30

Spelling instruction, as well, was modernized. Systematized pre- and post-test spelling instruction, for which students maintained their own progress charts, superseded the traditional "spelling bee." The lexicon of school literacy instruction changed noticeably; literary and religious terms were replaced by the language of democratic social life, names of institutions and occupations, and the terminology of business transactions and the industrial work-place.

Thus, evolutionary social reform and industrial development was the value framework pervading early and mid-twentieth-century literacy instruction. Literacy was seen as a vehicle for expression, social communication and vocational competence, rather than for the improvement of the soul. But its moral imperatives were no less strongly instilled. It was not until well after the Second World War that the neutrality of scientific pedagogy came to be seen as absolving teachers of their traditional moral and spiritual leadership roles. For the progressives, scientific intervention meant only the more equitable and efficient realization of stated normative and political goals, not their elimination from the educational field. In Dewey's words, education was both an art and a science; science enabled the optimal development of the art of education.

But the attempt to reconcile apparent contradictions and conflicts within social praxis, to totalize personal, social and empirical natures-Dewey's intellectual inheritance from Hegel-was, finally, the undoing of progressivism. For it was the very ambiguity of progressive rhetoric and sloganism in its attempt to dialectically resolve contradictions (between self and society, individual and institution, science and art, education and socialization) that led to the transformation of progressive ideals into industrial practices. The popular rhetoric of "individualization" of instruction, for example, was employed by both progressives and industrialists, but to very different ends. Throughout the progressive era, apparently harmonious, but actually divergent goals and practices caused education in general, and literacy instruction in particular, to vacillate between the extremes of a socialized education and an industrial socialization.

### The Technology of Literacy Instruction

By the end of the Second World War, social and political conditions were set for a major shift in literacy instruction. Assessing the post-War era, historian H. Covell explained:

The shocking discovery that many of the young men in military service could not read adequately, and the impetus given the study of science by the discovery of nuclear energy and the space race have combined to result in a greater emphasis on the need for continuing instruction . . . of the specific skills needed in

The term "functional literacy" was coined by the US Army to indicate "the capability to understand instructions necessary for conducting basic military functions and tasks . . . fifth grade reading level."32 While our inheritance from the Army testing of the First World War was the concept of "IQ" as a measure of ability,33 the educational legacy of the Second World War may have been "functional literacy" as a measure of vocational and social competence. Throughout the thirty-year development of the technocratic model, functional literacy remained a goal of North American schools, leading ultimately to the competencybased education movement of the 1970s.

After the Second World War, progressive education was besieged by public and media criticism. In his nefarious search for Communist influences, US Senator Joseph McCarthy singled out progressivism as overly permissive and anti-American. Scientists and industrialists indicted American schools for failing to keep pace with the Russians in the production of technical expertise. In So Little for the Mind, classicist educator Hilda Neatby argued that the "amorality" of progressive education had spawned "an age without standards."34 Out of the by then unruly weave of "child-centred" instruction and industrial management. a "neutral" and efficient system of instruction emerged: the technocratic model was a refinement of the scientific strand of progressivism.

To educators of the "Atomic Age," then, it must have seemed eminently reasonable that schooling, along with other institutions, should become more scientific in order to promote universal literacy. Educational science would provide both the means and ends of education: a body of universally applicable skills of reading and writing, transferable to a variety of social and vocational contexts. The psychological research which had fitted so neatly with the industrial reforms of the progressive era, now established the direction of technological literacy instruction. Throughout the 1950s and 1960s, evaluation-oriented reading research stipulated to an ever-greater extent the instructional form and curricular content of North American literacy instruction. Following Thorndike, literacy was conceived of according to a behaviourist stimulus/response model.

The linguistic and ideational features of the text, the stimulus, could be structured and manipulated to evoke the desired skill-related responses, ranging from rudimentary "decoding" to more advanced skills of "comprehension." Student response could then be measured to determine the student's level of language

development.

Literacy was thus scientifically dissected into individually teachable and testable subskill units. Educational publishers and, later, multinationals developed total packaged reading "systems," based as much on exacting marketing research, as on the insights of reading psychology. Beginning in the 1950s, teachers were introduced to the first in a series of "foolproof" methods for developing the "skills" of literacy (SRA, and later DISTAR, CRP). Among the inbuilt incentives of packaged programmes were promises of decreased planning and grading time, diagnostic tests, glossy audiovisual aids, precise directions for effective "teacher behaviour," and the assurance of scientific exactitude and modernity.

One widely used reading series, Ginn 720, a XEROX product revised for different countries to enable international distribution, defines its approach to literacy instruction:

By using a management system the teacher can select specific objectives to be taught, monitor pupils' learning progress continuously, and diagnose the source of individual learning problems, prescribe additional instruction and meet pupils' needs and make sure the pupils have achieved proficiency in skills objectives (p. ii).

As a "professional," the technocratic teacher is encouraged to see the educational process in medical and managerial metaphors. Students are diagnosed, prescribed for, treated and checked before proceeding to the next level of instruction, which corresponds to a theoretical level of advanced literate competence. The Ginn 720 student, for instance, is processed through fourteen such skill levels from ages six to fourteen.

A strong selling point of these programmes is their capacity to "individualize" instruction, based on the students' needs as assessed by accompanying diagnostic tests. Students with the same "needs" are grouped, and each reading group is assigned a basal reader, with adjunct worksheets and exercise books. Then, instructional "treatment" begins. Typically, teachers will monitor oral reading, review stories and conduct discussions with one group, while other groups work at their desks, completing worksheets of "fill in the blanks" and multiple-choice formats. Composition and literature study are not undertaken intensively until the secondary grades, when it is assumed that the student will have acquired the basic "skills" of literacy.

Because the dominant view since the Second World War has been to equate functional literacy with basic reading skills, it is only recently that a correlative systematization of writing instruction has begun. Elementary writing instruction remains a highly variable blend of progressive "creative writing" and "language experience" with skill-based exercises; most secondary writing instruction is undertaken in the context of literature study. This is partially the result of the continuing influence of university English literature departments on conventional approaches to writing and criticism. However, in light of increasing complaints about high school graduates' inability to write both essay and business formats, writing instruction is likely to follow a similar "research-anddevelopment" process towards increased standardization.

How are speaking and listening skills defined within technocratic literacy instruction? The progressive acceptance of the child's own dialect and speech has carried over into today's schools, having been sustained by the progressive revival of the late 1960s. But relatively little attention is paid to oral language instruction in intermediate and secondary classrooms, apart from discussions of highly variable quality. As for listening skills, "management instructions" and "comprehension questions" delimit teachers' verbal behaviour. Student listening becomes first and foremost listening to instructions and questions, rather than to substantive explanations of curricular content.

Every attempt is made within technocratic literacy instruction to specify its "behavioural objectives" in value-neutral terminology. Consequently, explicit ideological content is absent, overridden by the instructional format and skills orientation of the literacy text. The "skills" to be taught are thus ideologically neutralized; lessons aim to improve students' ability to grasp "word meaning," "context clues," and "decoding skills." In the teacher's overview chart of the Ginn programme, literature study—the focal point of moral and social instruction in previous eras - is reduced to a body of neutral skills (for example "note the poet's use of animal symbolism," "use alliteration"). These guidelines clearly indicate to teachers that they need not consider literacy instruction a matter of moral or social edification, but should simply "facilitate" the programme as professionally as possible.

But such goals and practices are not value neutral. How is it possible to "infer character motivation," for instance, without calling into play personal and social values? Similarly, we must ask how a student can determine "structures of cause and effect" in a textual narrative without invoking normative rules of social context and action? As Wittgenstein35 observed, every question and statement embodies a normative assumption; skills and concepts are not learned in isolation, but in the context of judgments.

The kind of research which focuses on the manner in which school readers inculcate social attitudes through the portraval of particular roles, personality structures, and orientations to action, 36 yields little beyond a surface level of understanding of the cumulative effects of technocratic texts. Instructional systems-however non-sexist, non-racist and non-secular in content-communicate not only a synthetic world-view, but a particular attitude towards literacy: literacy is conceived of as a set of neutral behaviours within an attendant fabricated world-view, in which little of cultural or social significance ever occurs. What is conveyed to the teacher, correspondingly, is a reductive view of literacy instruction as the scientific management of skills transmission.

This claim to "neutrality" and cross-contextual validity places literacy instruction in line with the dominant belief that North American schools should assume no particular moral or political bias: there is an explicit avoidance of any story content or language that might appear to discriminate against, or exclude,

any subcultural viewpoint. The result is an inherent blandness, superficiality and conservatism in the texts children read. What standardized readers communicate to children is "endlessly repeated words passed off as stories." 37 In order to capture the multinational market, publishers and editors must create a product which will pass as culturally significant knowledge in diverse social contexts, without offending the sensibilities of local parents, teachers, special-interest groups, politicians, and, of course, administrators who decide purchases. The result is a "watering down" of the content for marketing purposes. As Williams suggests, the larger the audience of a communications medium, the more homogeneous becomes the message and the experience for its consumers.<sup>38</sup> Technocratic literacy systems posit an imaginary "every-student" much as television networks seek to identify and communicate with "the average viewer."

Ironically, by attempting to address everyone, such literacy texts succeed in communicating with no-one. As a result, this literacy model actively militates against the development of full communicative competence. In the attempt to design behaviourally infallible instructional systems, curriculum developers exclude all but the most trivial levels of individual and cultural difference. As a result, the dramaturgical aspect of teaching, the moral convictions and cultural experience of students and teachers-key to both progressive and classical instruction-become "variables" which potentially interfere with the smooth operation of systematized pedagogy.

In secondary schools, the linear information processing model of technocratic instruction (stimulus/response, input/output), has led to an increase in "functional" exercises, such as reading classified advertisements, filling out job and credit applications, and so on. To enable ease and consistency of assessment, however, such tasks often encourage the learning of linear modes of functioning which exclude contextual factors. Several studies have questioned the validity of functional literacy assessment and the success of instruction in producing vocational competence.39 Often, the pursuit of an explicitly "functional" literacy presents as legitimate educational knowledge information which is artificially simplified, linear, mechanistic, and essentially powerless.

Classicism was condemned for imposing a colonized aristocratic world view on every student. Progressivism was criticized for its subversive and "leftwing" ideology. But technocratic education imposes only the surface features, the "skills," of a world view, and a predominantly "middle class" one at that. We argue that where technocratic instruction dominates in classrooms and in teacher training institutions, the literacy of students will remain culturally and intellectually insignificant. And, given the informational content and cognitive simplicity of the texts and methods used, and the mechanistic character of the interactions prescribed, we have good reason for concern about the students who succeed in the programmes.

#### Literacy Instruction: Derived or Imposed?

By way of conclusion, we have little to offer beyond the observation that cries of falling standards and widespread "illiteracy" among today's graduates

appear vacuous given the non-comparability of "literacy" as defined by the public education system since its inception. What we wish to consider in closing, however, are certain implications of this analysis for contemporary problems of pedagogy and research.

As the number and variety of students in public schools has increased, literacy curriculum, instruction and evaluation have become more and more standardized. With the relinquishing of family and community control over education to centralized government agencies came the expectation of universal mechanisms of accountability. The rise of standardized testing culminated in the recent move throughout North America towards universal functional literacy testing. The popular ethic of functional literacy, however, begs crucial questions: Functional at what? In what context? To what ends? And is it in the interests of the literate individual to become "functional" within any and every economic and political circumstance?

In liberal-democratic societies, participation in the political process implies not only the ability to operate effectively within existing social and economic systems, but also to make rational and informed judgements about the desirability of those systems themselves. Where the citizen has rights and duties with respect to political, social and economic orders, the literate exercise of such rights necessarily presupposed competences above and beyond those required to carry out limited interpersonal and occupational responsibilities. The glory of technocratic education-its neutralization of personal, social and political sanctions, indeed its independence from any substantive context and, therefore, content-produces students who follow instructions simply because they are there: the designated and assessed conditions of proceeding to the next level of instruction. In disregarding the social and ethical dimensions of communicative competence, technocratic education nurtures the literal, the superficial, and uncommitted, but "functionally" literate.

The tendency among both national and international development agencies has been to assume that increasing the percentage of a populus that can read and write-as measured by years of schooling or standardized tests-is essential to furthering a nation's political interests and social participation. The rush to modernize schooling in developing countries and to cut educational costs in developed countries serves to increase the appeal of cost-efficient and scientifically based "state-of-the-art" literacy programmes.

Yet models of literacy instruction have always been derived from concrete historical circumstances. Each has aimed to create a particular kind of individual, in a particular social order. In the US, the substance of literacy instruction was derived from distinctively American language, culture and economic life. In Canada, on the other hand, each era involved the importation of a model of literacy instruction, first from Britain, and subsequently from the US. School children recited "power should make from land to land, the name of Britain trebly great" (Tennyson 1883), evoking en masse God's salvation of their majesties in morning song, and learning to read and write, in the end, "for Queen and country." The question "Whose country?" was never asked. Later, in residential schools, Indian children were beaten for speaking their native tongue, and were taught to read "See, Jane, see! Jane helps mother in the kitchen." In effect, an

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imposed literacy model was reimposed to eradicate an indigenous native culture. As A. Wilden notes, the colonized sensibility is often convinced of the inauthenticity of its own cultural messages. 40 What are the social, cultural and political consequences of a national literacy which is based on imposed, rather than derived, culturally significant information?

Today, locally adapted literacy curricula are purchased from US-based multinational publishers. These corporations are able to absorb research and marketing costs, taking what are called "loss leaders" in the certainty of dominating the international educational market. Crucial in the success of this enterprise are two beliefs: first, that there is no necessary relationship between the processes of literacy acquisition and the literate product; and second, that it is possible to transmit literacy per se, as a value-free, context-neutral set of communicational skills. Both beliefs are false. Unless the instructional process itself is educational, the product cannot be an educated individual. The context within which we acquire language significantly mediates meaning and understanding in any subsequent context of use. Our analysis has indicated that the processes and materials of literacy instruction have been based historically on the ideological codes and material constraints of the society from which they are derived. We argue that the wholescale importation of a literacy model, imposed and not locally derived, into both developed and developing "colonies" counts as cultural imperialism. We cannot look at reading and writing per se. We have to ask instead what kind of child will take readily to and profit from a given model? What is the nature of motive formation that an instructional model depends on and develops? And, most importantly, what form of individual and social identity will the programme engender?

It is within this set of questions that educators have defined "what will count" as literacy in a given era. A literacy curriculum which is imposed, whether on individuals or entire cultures, cannot serve the same ends as one that is derived. We confront today two practical problems: solution of the alleged "literacy crisis" in developed countries, and the advancement of mass literacy in developing nations. The intention of this historical reconstruction has been to refocus debate on these questions, and to broaden the context of that debate beyond the disciplinary constraints of educational psychology and commerce, within which it has been largely confined for the last thirty years.