

Notes

1 Introduction

1. The research for this report started life as part of a working group project on curriculum innovations in the digital age generously supported by the Digital Media and Learning Research Hub working groups competition 2010 with funding from the John D. and Catherine T. MacArthur Foundation. Thanks are due in particular to the working group participants, Ola Erstad, Øystein Gilje, Jen Groff, John Morgan, Sarah Payton, Rebecca Rufo-Tepfer, and Arana Shapiro, whose insider experience of curriculum innovation helped shape the research.

2. Seminal research on curriculum and education reform from either side of the Atlantic includes Michael W. Apple, *Official Knowledge: Democratic Education in a Conservative Age*, 2nd ed. (New York: Routledge, 2000); Stanley Aronowitz and Henry A. Giroux, *Education Still under Siege*, 2nd ed. (Westport, CT: Bergin and Garvey, 1993); Stephen J. Ball, *Education Reform: A Critical and Post-structuralist Approach* (Buckingham, UK: Open University Press, 1994); David C. Berliner and Bruce J. Biddle, *The Manufactured Crisis: Myths, Fraud, and the Attack on America's Public Schools* (Reading: MA: Addison-Wesley, 1995); Basil Bernstein, *Pedagogy, Symbolic Control and Identity: Theory, Research, Critique*, rev. ed. (Oxford: Rowman and Littlefield, 2000); Ivor F. Goodson, *Learning, Curriculum*

and *Life Politics* (New York: Routledge, 2005); Linda McNeil, *Contradictions of School Reform: Educational Costs of Standardized Testing* (New York: Routledge, 2000); William F. Pinar, *What Is Curriculum Theory?* (Mahwah, NJ: Erlbaum, 2004); Michael F. D. Young, *Bringing Knowledge Back In: From Social Constructivism to Social Realism in the Sociology of Education* (New York: Routledge, 2008).

3. The 1983 text of *A Nation at Risk: The Imperative of Educational Reform* is archived at <http://www2.ed.gov/pubs/NatAtRisk/index.html>.

4. Thomas Osborne and Nikolas Rose, "Governing Cities: Notes on the Spatialisation of Virtue," *Environment and Planning D: Society and Space* 17 (1999): 737–760; Nikolas Rose, *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century* (Princeton, NJ: Princeton University Press, 2007).

5. Wiebe Bijker and John Law, *Shaping Technology/Building Society: Studies in Sociotechnical Change* (Cambridge, MA: MIT Press, 1992); Noel Gough, "Voicing Curriculum Visions," in *Curriculum Visions*, ed. William E. Doll and Noel Gough (New York: Peter Lang, 2002), 1–22; Ciaran Sugrue, ed., *The Future of Educational Change: International Perspectives* (New York: Routledge, 2009).

6. Alex Molnar, *School Commercialism: From Democratic Ideal to Market Commodity* (New York: Routledge, 2005).

7. Michael W. Apple, *Educating the "Right" Way: Markets, Standards, God, and Inequality*, 2nd ed. (New York: Routledge, 2006); Stephen J. Ball, *Education plc. Understanding Private Sector Participation in Public Sector Education* (New York: Routledge, 2007); Joel Spring, *Globalization of Education: An Introduction* (New York: Routledge, 2009).

8. David Buckingham, *The Material Child: Growing Up in Consumer Culture* (Cambridge, UK: Polity, 2011).

9. Peter Miller and Nikolas Rose, *Governing the Present: Administering Economic, Social and Personal Life* (Cambridge, UK: Polity, 2008).

10. Stephen J. Ball, *The Education Debate* (Bristol, UK: Policy Press, 2008); Stephen J. Ball, *Global Education Inc.: New Policy Networks and the*

Neo-liberal Imaginary (New York: Routledge, 2012); Faizal Rizvi and Bob Lingard, *Globalizing Education Policy* (New York: Routledge, 2010).

11. Ben Williamson, "Centrifugal Schooling: Third Sector Policy Networks and the Reassembling of Curriculum Policy in England," *Journal of Education Policy* (2012), doi: 10.1080/02680939.2011.653405.

12. Constance M. Yowell, "Connected Learning: Designed to Mine the New, Social, Digital Domain," DMLcentral.net, March 1, 2012, <http://www.dmlcentral.net/blog/constance-m-yowell-phd/connected-learning-designed-mine-new-social-digital-domain>.

13. Zygmunt Bauman, *Liquid Times* (Cambridge, UK: Polity, 2007).

14. Manuel Castells, *Communication Power* (New York: Oxford University Press, 2009); Henry Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York: New York University Press, 2006).

15. Juha Suoranta and Tere Vaden, *WikiWorld* (London, UK: Pluto Press, 2010).

16. Cathy N. Davidson and David T. Goldberg, *The Future of Learning Institutions in a Digital Age* (Cambridge, MA: MIT Press, 2009).

17. Trebor Scholz, ed., *Learning through Digital Media: Experiments in Technology and Pedagogy* (New York: Institute for Distributed Creativity, 2011).

18. Michael F. D. Young, *The Curriculum of the Future: From the 'New Sociology of Education' to a Critical Theory of Learning* (London: Falmer Press, 1998).

19. Sharon Gewirtz and Alan Cribb, *Understanding Education: Sociological Perspectives* (Cambridge, UK: Polity, 2009).

20. This framework is influenced by the approaches of Michel Foucault and Bruno Latour as they have been redeployed in educational research and other related sociological studies.

21. Stephen J. Ball, *Education Reform: A Critical and Post-Structural Approach* (Buckingham, UK: Open University Press, 1994); Stephen J.

Ball, Meg Maguire and Annette Braun, *How Schools Do Policy: Policy Enactments in Secondary Schools* (New York: Routledge, 2012).

22. Tara Fenwick and Richard Edwards, *Actor-Network Theory in Education* (New York: Routledge, 2010); Tara Fenwick, Richard Edwards, and Peter Sawchuk, *Emerging Approaches to Educational Research: Tracing the Sociomaterial* (New York: Routledge, 2012).

23. <http://www.enquiringminds.org.uk>. I was a researcher on this project throughout its duration.

24. <http://www.hightechhigh.org/>; <http://gse.hightechhigh.org/>.

25. <http://www.innovationunit.org/our-services/projects/learning-futures-increasing-meaningful-student-engagement>

26. <http://education.qld.gov.au/corporate/newbasics/>.

27. <http://www.rsaopeningminds.org.uk/>.

28. <http://www.q2l.org>.

29. <http://www.chicagoquest.org>.

30. <http://www.p21.org>.

31. <http://www.wholeeducation.org>.

2 Curriculum Change and the Future of Official Knowledge

1. Pinar, *What Is Curriculum Theory?*; William F. Pinar, William M. Reynolds, Patrick Slattery, and Peter M. Taubman, *Understanding Curriculum: An Introduction to the Study of Historical and Contemporary Curriculum Discourses* (New York: Peter Lang, 1995).

2. Apple, *Official Knowledge*.

3. Dave Scott, *Critical Essays on Major Curriculum Theorists* (New York: Routledge, 2008).

4. Berliner and Biddle, *The Manufactured Crisis*.

5. Useful critical essays on the knowledge economy from American and British perspectives are provided in Hugh Lauder, Michael Young, Harry Daniels, Maria Balarin and John Lowe, eds., *Educating for the Knowledge Economy: Critical Perspectives* (New York: Routledge, 2012).
6. Michael F. D. Young, *The Curriculum of the Future: From the 'New Sociology of Education' to a Critical Theory of Learning* (London: Falmer Press, 1998).
7. Aronowitz and Giroux, *Education Still under Siege*; Ball, *Education Reform*.
8. Pinar, *Curriculum Theory?*; Anthony Seldon, *An End to Factory Schools: A Manifesto for Education 2010–2020* (London: Centre for Policy Studies, 2010).
9. Lois Weiner, "Schooling to Work," in *Post-Work: The Wages of Cybernation*, ed. Stanley Aronowitz and Jonathan Cutler (New York: Routledge, 1998), 185–201.
10. Ball, *Education Reform*, 46.
11. James Paul Gee, *Situated Learning and Literacy: A Critique of Traditional Schooling* (New York: Routledge, 2004).
12. Philip Brown, Hugh Lauder and David Ashton, *The Global Auction: The Broken Promise of Education, Jobs, and Incomes* (New York: Oxford University Press, 2011).
13. International Society of the Learning Sciences, Overview (2004), <http://www.isls.org/about.html>.
14. Gert Biesta, *Beyond Learning: Democratic Education for a Human Future* (Boulder, CO: Paradigm, 2006).
15. Margaret Weigel, Carrie James, and Howard Gardner, "Learning: Peering Backward and Looking Forward in the Digital Era," *International Journal of Learning and Media* 1, no. 1 (2009): 1–18.
16. Michael F. D. Young, "Education, Globalisation and the 'Voice of Knowledge,'" in *Educating for the Knowledge Economy: Critical Perspectives*,

ed. Hugh Lauder, Michael Young, Harry Daniels, Maria Balarin and John Lowe (New York: Routledge, 2012), 139–151.

17. Hank Bromley and Michael W. Apple, eds., *Education/Technology/Power: Educational Computing as a Social Practice* (Albany: State University of New York Press, 1998).

18. See *Demos Quarterly* 1 (Winter 1993), <http://www.demos.co.uk/files/openingminds.pdf?1240939425>.

19. John Morgan, “Enquiring Minds: A Radical Curriculum Project?” *Forum* 53, no. 2 (2011): 261–272.

20. Sara Candy, “Opening Minds: A Curriculum for the 21st Century,” *Forum* 53, no. 2: 286.

21. For an elaboration of the distinction between performance and competence modes, see Bernstein, *Pedagogy, Symbolic Control and Identity*.

22. Partnership for 21st Century Skills, *21st Century Readiness for Every Student: A Policymaker’s Guide* (Tucson, AZ: Partnership for 21st Century Skills, 2011), http://www.p21.org/storage/documents/policymakers_guide_final.pdf.

23. <http://www.p21.org>. P21 also offers a “one-stop shop” of information, resources, and community tools, Route 21, which features video downloads and an extensive resources library, <http://route21.p21.org>.

24. David Hartley, *Re-schooling Society* (London: RoutledgeFalmer, 1997); Young, *The Curriculum of the Future*.

25. Lauder et al., *Educating for the Knowledge Economy?*

26. Young, *Bringing Knowledge Back*.

27. Brown, Lauder, and Ashton, *Global Auction*.

3 Networks, Decentered Systems, and Open Educational Futures

1. Luc Boltanski and Eve Chiapello, *The New Spirit of Capitalism* (London: Verso); Manuel Castells, *The Rise of the Network Society* (Oxford,

UK: Blackwell, 1996); Helen McCarthy, Paul Miller, and Peter Skidmore, eds., *Network Logic: Who Governs in an Interconnected World?* (London, UK: Demos, 2004); Nigel Thrift, *Knowing Capitalism* (Thousand Oaks, CA: Sage).

2. Johnny Ryan, *A History of the Internet and the Digital Future* (London: Reaktion, 2010).

3. Slavoj Žizek, *Violence* (London: Profile, 2008); Bauman, *Liquid Times*.

4. danah boyd, "Social Network Sites as Networked Publics: Affordances, Dynamics, and Implications," in *A Networked Self: Identity, Community, and Culture on Social Network Sites*, ed. Zizi Papacharissi (New York: Routledge, 2011), 39–58; Ito et al., *Hanging Out*.

5. Davidson and Goldberg, *The Future of Learning Institutions*; Alan Liu, *The Laws of Cool: Knowledge Work and the Culture of Information* (Chicago: University of Chicago Press, 2004); Scholz, *Learning through Digital Media*.

6. Michael A. Peters, "'Openness' and the Global Knowledge Commons: An Emerging Mode of Social Production for Education and Science," in *Educating for the Knowledge Economy?: Critical Perspectives*, ed. Hugh Lauder, Michael Young, Harry Daniels, Maria Balarin, and John Lowe, 66–76 (New York: Routledge, 2012).

7. Katie Salen, Rob Torres, Laura Wolozin, Rebecca Rufo-Tepper, and Arana Shapiro, *Quest to Learn: Developing the School for Digital Kids* (Cambridge, MA: MIT Press, 2011).

8. James Paul Gee, *What Video Games Have to Teach Us about Learning and Literacy* (New York: Palgrave MacMillan, 2003); Katie Salen, ed., *The Ecology of Games: Connecting Youth, Games, and Learning* (Cambridge, MA: MIT Press, 2008).

9. Salen et al., *Quest to Learn*, 32–33.

10. David Hartley, "The Instrumentalization of the Expressive," in *Schooling, Society and Curriculum*, ed. Alex Moore (New York: Routledge, 2006), 60–70.

11. William E. Doll, "Complexity and the Culture of Curriculum," *Educational Philosophy and Theory* 40, no. 1 (2008): 190–212.
12. Fenwick, Edwards and Sawchuk, *Emerging Educational Research*.
13. All references are from the New Basics project Web site: <http://education.qld.gov.au/corporate/newbasics/>.
14. Keri Facer and Hannah Green, "Curriculum 2.0: Educating the Digital Generation," in *Unlocking Innovation: Why Citizens Hold the Key to Public Service Reform*, ed. Simon Parker (London, UK: Demos, 2007), 47–58.
15. <http://schoolofeverything.com>. For a similar initiative in America, see <http://p2pu.org>.
16. Suoranta and Vadén, *WikiWorld*.
17. Hartley, *Re-schooling Society*, 155.
18. Frank Webster, *Theories of the Information Society*, 3rd ed. (New York: Routledge, 2006).
19. Critical accounts of networks in education include Jo Frankham, "Network Utopias and Alternative Entanglements for Educational Research and Practice," *Journal of Education Policy* 21, no. 6 (2006): 661–677; Jorge Avila de Lima, "Thinking More Deeply about Networks in Education," *Journal of Educational Change* 11 (2010): 1–21; Kathleen Ferguson and Terri Seddon, "Decentered Education: Suggestions for Framing a Socio-spatial Research Agenda," *Critical Studies in Education* 48, no. 1 (2007): 111–129.
20. Ferguson and Seddon, "Decentered Education," 117–118.
21. Jaron Lanier, *You Are Not a Gadget* (London, UK: Penguin, 2010).
22. Castells, *Communication Power*, 413.
23. Jaron Lanier, "Does the Digital Classroom Enfeeble the Mind?" *New York Times*, September 16, 2010.
24. Pinar, *Curriculum Theory*, 8. Also on the "miseducation" of the Internet, see Ellen Seiter, *The Internet Playground: Children's Access, Entertain-*

ment and Mis-Education (New York: Peter Lang, 2005), and Molnar, *School Commercialism*.

4 Creative Schooling and the Crossover Future of the Economy

1. David Held, *Cosmopolitanism: Ideals and Realities* (Cambridge, UK: Polity, 2010); Bob Jessop, *The Future of the Capitalist State* (Cambridge, UK: Polity, 2002).

2. For a useful recent synthesis of the contesting positions in this debate, see David Baker, "The Educational Transformation of Work: A Synthesis," in Hugh Lauder et al., *Educating for the Knowledge Economy?: Critical Perspectives*, ed. Hugh Lauder et al. (New York: Routledge, 2012), 97–113.

3. <http://www.hightechhigh.org/about/index.php>.

4. Representative arguments can be found in Liu, *The Laws of Cool*; Jim McGuigan, *Cool Capitalism* (London: Pluto Press, 2009); Jamie Peck, *Constructions of Neoliberal Reason* (New York: Oxford University Press, 2010).

5. Michael Hardt, "Affective Labour," *Generation Online* (2008), http://www.generation-online.org/p/fp_affectivelabour.htm.

6. Gilles Deleuze, "Postscript on the Societies of Control," *October* 59 (1992): 3–7.

7. Thomas S. D. Osborne, "Against 'Creativity': A Philistine Rant," *Economy and Society* 32, no. 4 (2003): 507–525.

8. David Hartley, "Marketing and the 'Re-enchantment' of School Management," *British Journal of Sociology of Education* 20, no. 3 (1999): 309–323; Ben Williamson, "Effective" or "Affective" Schools? Technological and Emotional Discourses of Educational Change, *Discourse: Studies in the Cultural Politics of Education* 33, no. 3 (2012): 425–441; Nigel Wright, "Leadership, Bastard Leadership, and Managerialism," *Educational Management, Administration and Leadership* 29, no. 3 (2001): 275–290.

9. Hannah Green and Celia Hannon, *Their Space: Education for a Digital Generation* (London: Demos, 2007), 23.
10. Pat Kane, *The Play Ethic: A Manifesto for a Different Way of Living* (London: Pan MacMillan, 2004); Julian Kücklich, "Precarious Playbor: Modders and the Digital Games Industry," *The Fibreculture Journal* 5 (2005), <http://five.fibreculturejournal.org/fcj-025-precariou-playbour-modders-and-the-digital-games-industry/>; Trebor Scholz, "Facebook as Playground and Factory," in *Facebook and Philosophy*, ed. D. E. Wittkower (Chicago: Open Court/Carus Publishing, 2010), 241–252.
11. Alec Patton, *Work That Matters: The Teacher's Guide to Project-Based Learning* (London: Paul Hamlyn Foundation, 2012).
12. Important studies are Apple, *Official Knowledge*; Ball, *Education plc*; Ball, *Global Education Inc.*; Buckingham, *Material Child*; Molnar, *School Commercialism*; Seiter, *Internet Playground*; Joel Spring, *Globalization of Education*.
13. Benjamin R. Barber, *Consumed: How Markets Corrupt Children, Infantilize Adults, and Swallow Citizens Whole* (New York: W. W. Norton and Co., 2007).
14. Rizvi and Lingard, *Globalizing Education Policy*.
15. Ball, *The Education Debate*.
16. In the United Kingdom, for example, the think tank Demos has produced multiple publications linking educational innovation to high-tech R&D.
17. Fenwick and Edwards, *Actor-Network Theory in Education*.
18. <http://www2.futurelab.org.uk>.
19. <http://www.enquiringminds.org.uk>.
20. <http://www.wholeeducation.org>.
21. Salen et al., *Quest to Learn*.
22. <http://www.newvisions.org>.

23. Fenwick, Edwards, and Sawchuk, *Emerging Education Research*.
24. Stephen J. Ball and Sonia Exley, "Making Policy with 'Good Ideas': Policy Networks and the 'Intellectuals' of New Labour," *Journal of Education Policy* 25, no. 2 (2010): 151–169; David Hartley, "Rhetorics of Regulation in Education after the Global Economic Crisis," *Journal of Education Policy* 25, no. 6 (2010): 785–791; Ben Williamson, "Centrifugal Schooling: Third Sector Policy Networks and the Reassembling of Curriculum Policy in England," *Journal of Education Policy* (2012), doi: 10.1080/02680939.2011.653405.
25. On the distinctions between visible and invisible practices, see Basil Bernstein, "Social Class and Pedagogic Practice," in *Sociology of Education*, ed. Stephen J. Ball (New York: Routledge, 2004), 196–217.

5 Psychotechnical Schools and the Future of Educational Expertise

1. Michel Foucault, *Security, Territory, Population: Lectures at the Collège de France, 1977–1978*, trans. Graham Burchell (New York: Palgrave Macmillan, 2007).
2. Mitchell Dean, *Governmentality: Power and Rule in Modern Society*, 2nd ed. (Thousand Oaks, CA: Sage, 2010); Kenneth Hultqvist and Gunilla Dahlberg, eds., *Governing the Child in the New Millennium* (New York: RoutledgeFalmer, 2001); Nikolas Rose, *Governing the Soul: The Shaping of the Private Self*, 2nd ed. (New York: Free Association Books, 1999).
3. Miller and Rose, *Governing the Present*; Nikolas Rose, *Powers of Freedom: Reframing Political Thought* (Cambridge, UK: Cambridge University Press, 1999).
4. Gregor McLennan, "Traveling with Vehicular Ideas: The Case of the Third Way," *Economy and Society* 33, no. 4 (2004): 484–499; Thomas S. D. Osborne, "On Mediators: Intellectuals and the Ideas Trade in the Knowledge Society," *Economy and Society* 33, no. 4 (2004): 430–447.
5. Ball and Exley, *Good Ideas*; Williamson, *Centrifugal Schooling*.

6. Learning Futures, "Engaging Schools" (London, UK: Innovation Unit, 2010); Patton, *Work That Matters*.
7. Rose, *Governing the Soul*.
8. Lynn Fendler, "Educating Flexible Souls: The Construction of Subjectivity through Developmentality and Interaction," in *Governing the Child in the New Millennium*, ed. Kenneth Hultqvist and Gunilla Dahlberg (New York: Routledge), 132–133.
9. Bernstein, *Pedagogy, Symbolic Control and Identity*. For a learning theory perspective on competence, also see Weigel, James, and Gardner, "Learning."
10. Osborne, "Against 'Creativity,'" 508–509.
11. Kimberly Seltzer and Tom Bentley, *The Creative Age: Knowledge and Skills for the New Economy* (Buckingham, UK: Demos, 1999), 10.
12. Rob Pope, *Creativity: Theory, History, Practice* (New York: Routledge, 2005), 27.
13. <http://www.wholeeducation.org.uk>.
14. Thomas S. Popkewitz, "Numbers in Grids of Intelligibility: Making Sense of How Educational Truth Is Told," in *Educating for the Knowledge Economy?: Critical Perspectives*, ed. Hugh Lauder et al. (New York: Routledge, 2012), 177.
15. Rose, *Governing the Soul*.
16. <http://appsforgood.org/course/>.
17. Bill Lucas and Guy Claxton, *Wider Skills for Learning* (London: NESTA, 2009), 4.
18. Keri Facer and Jess Pykett, *Developing and Accrediting Personal Skills and Competences* (Bristol, UK: Futurelab, 2007); Nicola Bacon, Marcia Brophy, Nina Mguni, Geoff Mulgan, and Anna Shandro, *The State of Happiness: Can Public Policy Shape People's Wellbeing and Resilience?* (London, UK: Young Foundation, 2010).
19. Miller and Rose, *Governing the Present*.

20. Brown, Lauder and Ashton, *Global Auction*.
21. Rose, *Governing the Soul*, 116.
22. Neil Selwyn, "Looking beyond Learning: Notes toward the Critical Study of Educational Technology," *Journal of Computer Assisted Learning* 26 (2010): 65–72.
23. Torin Monahan, *Globalization, Technological Change, and Public Education* (New York: Routledge, 2005).
24. Thomas S. Popkewitz, *Cosmopolitanism and the Age of School Reform: Science, Education, and Making Society by Making the Child* (New York: Routledge, 2008).
25. Popkewitz, "Numbers in Grids of Intelligibility."

6 Globalizing Cultures of Lifelong Learning

1. Jenkins, *Convergence Culture*.
2. Castells, *Communication Power*.
3. Castells, *Communication Power*, 118–125.
4. Castells, *Communication Power*, 125.
5. <http://education.qld.gov.au/corporate/newbasics/>.
6. Rizvi and Lingard, *Globalizing Education Policy*, discuss the New Basics from the perspective of globalization and education policy.
7. Held, *Cosmopolitanism*.
8. John Morgan, Ben Williamson, Tash Lee, and Keri Facer, *Enquiring Minds: A Guide* (Bristol, UK: Futurelab, 2007), 14–15.
9. Goodson, *Learning, Curriculum and Life Politics*.
10. Morgan et al., *Enquiring Minds Guide*, 29.
11. Morgan et al., *Enquiring Minds Guide*, 24.
12. Facer and Pykett, *Developing and Accrediting*.

13. Patton, *Work That Matters*.
14. Peter Jarvis, "Globalisation, the Learning Society and Comparative Education," in *Sociology of Education*, ed. Stephen J. Ball (New York: RoutledgeFalmer, 2004), 72–86.
15. Gee, *Situated Learning*.
16. Xavier Bonal and Xavier Rambla, "Captured by the Totally Pedagogised Society: Teachers and Teaching in the Knowledge Economy," *Globalisation, Societies and Education* 1, no. 2 (2003): 169–184.
17. Buckingham, *Material Child*; Jane Kenway and Elizabeth Bullen, *Consuming Children: Entertainment-Education-Advertising* (Maidenhead, UK: Open University Press, 2001); Ellen Seiter, *Sold Separately: Parents and Children in Consumer Culture* (Bloomington: Indiana University Press, 1993).
18. Molnar, *School Commercialism*, 81 and 44–45.
19. Daniel T. Cook, "The Missing Child in Consumption Theory," *Journal of Consumer Culture* 8, no. 2 (2008): 219–243.
20. Lydia Martens, "Learning to Consume—Consuming to Learn: Children at the Interface between Consumption and Education," *British Journal of Sociology of Education* 26, no. 3 (2005): 343–357; Robin Usher, "Consuming Learning," in *Critical Pedagogies of Consumption: Living and Learning in the Shadow of the "Shopocalypse"*, ed. Jennifer A. Sandlin and Peter McLaren (New York: Routledge, 2009), 42.
21. Ball, *Education Debate*; Rose, *Powers of Freedom*.
22. Neil Selwyn, *Schools and Schooling in the Digital Age: A Critical Analysis* (New York: Routledge, 2011).
23. John Morgan and Ben Williamson, *Enquiring Minds: Schools, Knowledge and Educational Change* (Bristol, UK: Futurelab, 2008).

7 Making Up DIY Learner Identities

1. Popkewitz, "Numbers in Grids of Intelligibility."

2. A theory of retrospective and prospective learner identities is supplied by Bernstein, Pedagogy, *Symbolic Control and Identity*.
3. <http://education.qld.gov.au/corporate/newbasics/>.
4. Salen et al., *Quest to Learn*.
5. <http://www.chicagoquest.org>.
6. Learning Futures, "Engaging Schools."
7. David Price, "Learning Futures: Rebuilding Curriculum and Pedagogy around Student Engagement," *Forum* 53, no. 2 (2011): 273–284.
8. Nancy K. Baym, *Personal Connections in the Digital Age* (Cambridge, UK: Polity, 2010); Sherry Turkle, *Life on the Screen: Identity in the Age of the Internet* (London, UK: Phoenix, 1996); Sandra Weber and Claudia Mitchell, "Imagining, Keyboarding, and Posting Identities: Young People and New Media Technologies," in *Youth, Identity, and Digital Media*, ed. David Buckingham (Cambridge, MA: MIT Press, 2008), 25–48.
9. Axel Bruns, *Blogs, Wikipedia, Second Life and Beyond: From Production to Prodisage* (New York: Peter Lang, 2008); Michel Knobel and Colin Lanskshear, eds., *DIY Media: Creating, Sharing and Learning with New Technologies* (New York: Peter Lang, 2010).
10. Zizzi Papacharissi, ed., *A Networked Self: Identity, Community, and Culture on Social Network Sites* (New York: Routledge, 2011).
11. Rose, *Governing the Soul*; Rose, *Powers of Freedom*.
12. Lanier, *You Are Not a Gadget*.
13. Zygmunt Bauman, *The Art of Life* (Cambridge, UK: Polity, 2008); Ulrich Beck and Elisabeth Beck-Gernsheim, *Individualization: Institutionalized Individualism and Its Social and Political Consequences*, trans. Patrick Camiller (Thousand Oaks, CA: Sage, 2002).
14. Morgan and Williamson, *Enquiring Minds*.
15. Fenwick and Edwards, *Actor-Network Theory in Education*, 168.
16. Miller and Rose, *Governing the Present*.

