## Contents

1 What Do Students Bring to School? ........................................ 1
   1.1 Trajectories and Metaphors ........................................... 2
       1.1.1 Dynamic .................................................. 9
       1.1.2 Heterogeneous Features ...................................... 9
       1.1.3 Connectability and Infinite Juxtaposition .............. 9
       1.1.4 Resists Rupture ........................................... 10
       1.1.5 No Hierarchy ............................................. 10
       1.1.6 No Outside ................................................ 11
       1.1.7 Multiple Entrances ....................................... 11
   1.2 Traces and Trajectories ............................................. 12
   1.3 The Book ................................................................... 18

2 What Do They Link? ...................................................... 19
   2.1 Social Studies and the Students in Mrs. Olson’s Classroom .... 19
   2.2 The Roman Empire and the Students in Mr. Jackson’s Classroom ........................................ 22
   2.3 Prior Knowledge and Its Structure .................................. 26
       2.3.1 Piaget’s Schemes .......................................... 28
       2.3.2 Knowledge as a Structure ................................... 29
       2.3.3 Schema ..................................................... 31
   2.4 Lenses, Prior Knowledge, and Misconceptions .................. 34
   2.5 Prior Learning and Semiotic Understandings ..................... 38

3 How Is the Linking Process Prompted? ............................. 41
   3.1 The Biomes and the Students in Mrs. Chambers’ Classroom ... 41
   3.2 Sensory Cues ....................................................... 44
   3.3 The Middle Ages and the Students in Mrs. Schneider’s Classroom ........................................ 49
   3.4 Conceptual Cues ..................................................... 52
       3.4.1 Concrete Conceptual Links .................................. 53
       3.4.2 Structure Cues .............................................. 54
       3.4.3 Process Cues ............................................... 57
4 How Are School Content and What the Students Link Related? . . . 61
  4.1 Current Events and Studying China in Mr. Ritter’s Classroom . . . 61
  4.2 Linking by Example ............................................. 64
  4.3 Linking by Shared Characteristics ................................ 65
  4.4 Linking Now and Then ........................................... 69
  4.5 Linking Here and There ......................................... 73
  4.6 Linking by Analogy .............................................. 75

5 What Kinds of School Content and School Contexts Link? ........ 77
  5.1 Sea Mammals and Animals of the Rainforest in Mrs. Wilson’s
      Classrooms ................................................................. 77
  5.2 Contexts Within the School Walls ................................ 82
      5.2.1 Linking Across School Years .................................. 82
      5.2.2 Linking Across Content Areas .................................. 84
      5.2.3 Linking Within Content Areas .................................. 88

6 How Is the Linking Process Supported or Inhibited in the
    Classroom? .................................................................. 95
  6.1 Roles of Teachers and Learners .................................... 96
  6.2 Authority Sources in the Classroom ................................ 99
  6.3 Authority as Process ................................................. 106
  6.4 The Culture for Sharing Links ..................................... 109
      6.4.1 Providing Experiences ......................................... 109
      6.4.2 Responses to Student Links ................................. 112
      6.4.3 Prefaces to Student Links ................................. 124

7 Of What Value Are Student Links? ................................. 127
  7.1 Generative Learning and Depth of Processing .................. 127
  7.2 Potential for Understanding ...................................... 130
      7.2.1 Simple Links .................................................... 130
      7.2.2 Potential for Elaboration .................................. 131
      7.2.3 Linking for Understanding .................................. 133
  7.3 Linking, Learning Environments, and Achievement ............ 135
      7.3.1 SKL and Achievement ....................................... 136
  7.4 When Links Are not Useful ........................................ 140

8 How Is Linking (and Thus Learning) Like Unlimited Semiosis? 143
  8.1 Operationalizing Unlimited Semiosis ............................ 143
  8.2 Affect and Emotion .................................................. 150
      8.2.1 Indicators of Affect/Emotion Trajectory Dimension .... 151
      8.2.2 Affect as Cue: Semiosis Unfolding in the Classroom ... 155
  8.3 The Rhizome as a Dynamic System ............................ 160
  8.4 Making Meaning by Making Connections ........................ 165

Appendix: Research Methods ............................................. 169

References ................................................................. 195

Index ............................................................................... 205
Making Meaning by Making Connections
Schuh, K.L.
2017, XII, 207 p. 6 illus., Hardcover
ISBN: 978-94-024-0991-8