

Index

Note: page numbers in italics denote figures or boxes

- AAHE (American Association of Higher Education) 5, 10, 22, 171
- academic challenges 96, 119–20
- Academic Medicine* 3
- action research 2, 6–8
- active learning 96
- Active Learning in Higher Education* 3
- administrators 194, 201–2
- affective states 107–8
- Almer, E. D. 68
- American Association of Higher Education (AAHE) 5, 10, 22, 171
- American Political Science Association 82
- American Psychological Association 9, 82
- American Psychological Sciences conference 82
- American Psychologist* 45
- Anderson, L. W. 93
- Angel software 161
- Angelo, T. A. 6, 18, 39, 39–41, 68, 88
- anonymity in research 135, 140–1
- ANOVA (analysis of variance) 156, 157, 163
- answers, reasons for 107
- anxiety 111, 119–20
- Application Cards 66, 68
- Aristotle 8
- Arreola, R. A. 56
- Art Education* 3
- Aruguete, M. S. 124
- assessment
- alternative 65–8
 - effectiveness of teaching 18–19, 20–5, 72
 - formative/summative 51, 126
 - of learning 126–7
 - questions for 73–5
 - of reading and writing 130–1
 - role of 195–6
 - statistical analysis 149–51
 - techniques 18–20
 - understanding 131
 - see also* CATs (Classroom Assessment Techniques)
- assessment tools 26–7, 43–4, 72, 73–5
- assessment-focused programs 190
- assignments
- grades 125–6
 - grading rubric 61–2
 - peer review 62
 - writing 70, 130
- Atlas 159
- attention 120
- selective 143

- attitude scale 111
Ausubel, D. P. 106
authority, formal 37
average, statistical 151–3
- backward design viii, 75, 76, 76–7, 78
Bain, K. x, 21, 25, 26, 38, 90
Balch, W. R. 119
Banta, T. W. 74
Bartlett, F. C. 80
Belenky, M. F. 93
Belmont Report 138–41
beneficence in research 140
Benjamin, L. 21
Berk, R. A. 20
Berliner, D. C. 8
Best Teachers (Bain) 25, 26
bi-modal distribution 154, 155
Blackboard 161, 188, 190
Bligh, D. A. 67
Bloom, B. S. 93
Borkowski, J. G. 107
Boyer, E. L. 2, 4
 Scholarship Reconsidered 5, 178
Bransford, J. D. 6, 94
Braskamp, L. A. 60
Brewer, C. 87
Brown, A. L. 6, 94
Brown, W. F. 110
Burnett, A. N. 88
Business Education Forum 3
Buskist, W. x–xi, 30, 74
 Teacher Behavior Checklist 27,
 27–9, 30–1, 33
- Cambridge, B. L. 172
campus culture 22, 169–70, 177–8
campus resource centers 169–70
Carell, L. J. 114, 115
Carnegie Academy for the Scholarship
 of Teaching and Learning: *see*
 CASTL
Carnegie Foundation for the
 Advancement of Teaching 5, 10,
 171
Carnegie Scholars 10
Carter, K. 195
CASTL (Carnegie Academy for the
 Scholarship of Teaching and
 Learning)
 campus culture 22, 199
 funding 171
 National Institute 83
 research viii
 Shulman 10
CATs (Classroom Assessment
 Techniques) 6
 classroom group interviews 59–61
 cross-disciplinary 66–8
 peer reviews 50–3, 66–8
 rating forms 56–9
 students' involvement 43–4
 teaching 18–25
 understanding 81
Center for Postsecondary Research,
 Indiana University 95
Chapman, K. J. 87
Checklist Forms 54–5
Chick, N. L. 130–1
Chism, N. V. N. 50, 51, 52, 53, 54–5,
 56–9
Ciccone, T. 196
Clark, D. J. 59
Classroom Action Research
 Network 8
Classroom Assessment Techniques: *see*
 CATs
classroom data analysis 145–7
classroom group interview 59–61
classroom observation 52–3, 54–5, 73
Classroom Survey of Student
 Engagement (CLSSE) 96
clickers 87
clinical drug trials 123–4

- CLSSE (Classroom Survey of Student Engagement) 96
- Cocking, R. R. 6, 94
- cognition 93, 141
- cognitive ability 120
- cognitive psychology 79
- cognitive research 104–5, 141–4
- cognitive science 24–5, 94
- Cohen, J. 158
- Collaboration for the Advancement of College Teaching and Learning 83, 185
- collaborative learning 32–3, 96
- College Student Experiences Questionnaire research program 95
- Comenius 8
- Committee on Developments in the Science of Learning 94
- Communication Education* 83
- concentration 112, 119–20
- conferences 82–3
- confidentiality 177
- Confucian method of learning 92–3
- content knowledge 74
- content-focused approach 75
- continuing professional development 33
- control factors 158–9
- control group concept 123–4
- course goals 38–9
- course management software 161
- Cox, M. 16
- Cross, K. P. 6, 18, 39, 39–41, 68, 88
- data, interval/nominal/ordinal 150–1
- Davis, B. G. 73
- Davis, S. F. x–xi, 74
- deaf people/sign language study 107
- DeBord, K. A. 124
- delegating 38
- Department of Health and Human Services 132
- descriptive statistics 161–3
- Desire2Learn 161
- Dewey, J. 7, 9
- Diamond, R. 88, 126
- Directed Paraphrasing 66, 68
- director, teaching and learning centers 180–1, 194–5, 202
- discussion, writing of 70
- distribution curves 153, 154
- Dunlosky, J. 94, 104
- education psychologists 8
- educational experiences 95
- educators 11–12
see also teachers
- effect size 147, 157–8
- effectiveness of teaching 16–17
- accountability ix
- assessment 18–19, 20–5, 72
- campus culture 169–70
- improving 176
- strategies 25
- elaboration strategies 108
- Enhancing Teaching and Learning (ETL) 11
- Entwistle, N. 11
- essays 130
- ethical standards 123–4, 131–2
- ETL (Enhancing Teaching and Learning) 11
- evaluation
- end-of-course 50
- formative/summative 65–6
- mid-semester 49
- students 20–1, 44–6
- thinking processes 106–7
- evaluation forms 44, 46–51
- evidence-based studies 199–200
- exam performance 103–4
- Excel 160, 161

- expectations 80
experience/learning 110
Experimental Design (ED) 123
- facilitating 37–8
faculty
 classroom instruction 22–3
 confidentiality about problems 177
 effectiveness of teaching ix
 new/established 174–5
 ownership of center 180
 scholarship 182
 and students 95–6
faculty development centers 176–7,
 200–1
Faculty Development Committee 180
Faculty Priorities Reconsidered 5
feedback 48, 49, 60–1
Fink, L. D. ix, 21, 24, 88, 191
Flavell, J. H. 104
Foos, P. W. 108
Force Concept Inventory 75–6
Ford Teaching Project 8
Forum on Faculty Roles and
 Rewards 5
funding sources 171, 200
- Galileo Galilei 159
generalizability 149
Georgia, University of 174
Geyer, A. 46
Gilligan, C. 9
Gillmore, G. 45
Glassick, C. E. 193–4
Glenberg, A. M. 105
goal setting 103
Goodburn, A. 88
grade point average (GPA) 159
grades
 assessments 125–6
 bias 45
 distributions 121–2
 grading rubric 61–2, 63, 64
 graduate programs 23–4, 187
 Graesser, A. C. 94, 104
 grants 175, 186
 Grasha, A.: *Teaching Style Inventory* 34, 35–8
 Greenwald, A. G. 44–5
 Greimel-Fuhrmann, B. 46
 Grounded Theory Method 148
 group comparisons 155–6
 group interview 59–61
 group member assignment 87
 guided learning 107
 guidelines for good practice 178–83
 Gurung, R. A. R. 92, 114, 115, 132
- Hacker, D. J. 94, 104
Hall, G. S. 9
Harvard Educational Review 6
Hassel, H. 130–1
Hatch, T. ix
Haynie, A. 130–1
Herbart, Johann 8
higher education journals 3
History Teacher 3
Holtzman, W. H. 110
Hounsell, D. 11
How People Learn (National Research
 Council) 6
Huber, M. T. ix, 19, 193–4
human research participants 131–2
Human Subject Protection
 guidelines 132
Humanities Curriculum Project
 7–8
Hutchings, P. ix, 19, 21, 193, 194
Hutchins, R. M. 4, 88
- IATS (International Alliance for
 Teaching Scholars) 6, 83, 185
IDC (Instructional Development
 Council) 171

- IDEA Student Ratings of Instructions 48
- Impact Survey Questions (SoTL) 197–8
- Indiana University, Center for Postsecondary Research 95
- inferential statistics 154–6, 163
- information,
 acquisition/storage/retrieval 79
- information processing scale 112
- informed consent 133, 135–6, 137
- Institute for New Faculty Developers 83, 170
- Institutional Review Board (IRB) 72, 131–2
- instructional activities 110
- Instructional Development Council (IDC) 171
- instructional technology support office 179–80
- instructions, special 123–4
- International Alliance for Teaching Scholars (IATS) 6, 83, 185
- International Journal for the Scholarship of Teaching and Learning* 4
- International Mind, Brain, and Education Society 94
- International Society for Exploring Teaching and Learning (ISELT) 83
- International Society for the Scholarship of Teaching and Learning (ISSoTL) 6, 83, 132, 185
- interval scales 151
- introductory psychology students research 114
- Iowa Student Development Inventory 9
- IRB (Institutional Review Board) 72, 131–2
- IRB Procedures 133–7
- ISELT (International Society for Exploring Teaching and Learning) 83
- ISSoTL (International Society for the Scholarship of Teaching and Learning) 6, 83, 132, 185
- item-analysis example 129, 130
- James, W. 4, 9
- Jones, C. H. 113
- Jones, K. 68
- Journal of Chemical Education* 3
- Journal of College Science Teaching* 3
- Journal of Economic Education* 3
- The Journal of Effective Teaching* 84
- Journal of Teaching Writing* 83
- Journal on the Teaching of Psychology* 83
- journals 3, 83–6
- justice in research 140–1
- Keeley, J. 30
- Kennedy, E. J. 106, 109
- Kennedy Hearings 138
- King, P. M. 93
- Kitchener, K. S. 93
- knowing 92–4
- knowledge
 evaluation of 110
- learning 93
- prior 79–80, 110, 118
- stored 141
- study skills 142
- Krathwohl, D. R. 93
- Kuh, G. D. 6, 22
- language processing study 107
- LASSI (*Learning and Study Strategies Inventory*) 111, 111–12, 113
- Lawton, L. 106

- learning
abilities 79–80
approaches to 92
assessing 126–7
cognition 93
cognitive science 24–5
Confucian method 92–3
designing research into 120–5
experience 110
factors influencing 91
institutional perspective 88
investigation of 96, 102–3
knowledge dimension 93
measuring 81–2, 125
memory 79, 143–4
monitoring 20
optimizing 10, 88
pragmatic approach 92–3
previewing copies of slides 87
principles of 78–81
psychological factors 119–20
scholarship research 127
Socratic method 92–3
students 89, 90–1, 94–6
understanding 80–1
- learning, types
active 96
collaborative 32–3, 96
passive 103
sensory 110
- Learning and Study Strategies Inventory*
(LASSI) 111, 111–12, 115
- learning center for students 179
learning community 179
learning environment 95
learning goals
content-/results-focused 75
and teaching goals 87–8
learning styles 88, 91–2, 164
lecture notes 124
lectures, use of 67
Lehman, D. R. 92
- Levi, A. J. 130
Lewin, K. 7
Lewis, K. G. 47
Lewis, S. 195
Library of Teaching Center Resources
suggestions 203–5
life-long learning 105, 106
Likert scale 64
response form 47
Lilly Foundation viii, 10
Locke, N. M. 110
- McKeachie, W. J. 45
McKinney, K. 88
McTighe, J. viii, 42, 75, 76–8
Maeroff, G. I. 193–4
Magolda, M. B. B. 93
Maki, P. L. 88
Maki, R. H. 105, 126
Maricopa Community College 173
Marsh, H. W. 45
master teachers 30
mean, statistical 151–3
outliers 153
measurement scales 150
median 152
medical experiments 137–8
memorization by rote 92–3
memory 79, 80, 105, 143–4
mentoring programs 177, 191–3
Menzel, K. E. 114, 115
metacognition 104–5
active 108–10
affective state 107–8
cognitive monitoring 105–6, 141
evaluative thinking 106–7
future directions 109
organization 109
reading of literature 131
Meyers, R. 132, 135
Mind, Brain, and Education 94
minimal risk protocols 133

- Minute Paper 66
mode 152–3
Modern Language Association 82
Moeckel, C. 68
monitoring
 cognition 105–6, 141
 of learning 20
 memory 105
 stored knowledge 141
 thinking 104–5
Mora, J. J. 108
motivation 111, 119–20
Muddiest Point 66
Muhlig, J. 124
multimedia presentation 124
multiple factors 164–5
multiple-choice exams 127–8, 128,
 130
Myers, R. 196
- Naremore, R. C. 73
National Center on Postsecondary
 Teaching, Learning and
 Assessment 10–11
National Commission for the
 Protection of Human Subjects of
 Biomedical and Behavioral
 Research 138
National Foundation for the
 Improvement of Education 200
National Institute of Health 200
National Research Act 138
National Research Council, *How
 People Learn* 6
National Research Council committee
 94
National Science Foundation 200
National Survey of Student Engagement
 (NSSE) 95–6
National Writing Project 8
Nelson, C. E. 73
Newton's Force Laws example 75–6
normal distribution curves 153–4
note-taking 102–3, 115, 117
NSSE (*National Survey of Student
 Engagement*) 95–6
Nudist 159
Nuremberg Code 137–8
NVivo 159
- O'Meara, K. 5
One-Sentence Summary 66, 67
online courses 118, 190
Ory, J. C. 60
Ouimet, J. 96
- Pace's College Student Experiences
 Questionnaire 95
Palmer, D. R. 111, 111–12
Palo Alto, California 10
parametric statistics 153–4
Pashler, H. 87
Passover 8
Patrick, H. 195
pedagogical aids in textbooks 109
pedagogical book group
 discussions 203
pedagogical research viii, ix, 1–2
 assessment 18–20
 designing program 70–2
 multidisciplinary roots 3–4
 on-campus presentation 183, 185
 opportunities for 17
 scope of 15
 sharing findings 81–4
 as term 2–3, 4
Peden, B. 137
peer review 50–1
 assignments 62
 feedback 60–1
 Preobservation Conference Form
 53
 results 14
peer review conferences 81–2

- peer reviewed journals 83–4
Perry, W. G. 9, 93
personal response systems (PRS) 87
personal-motivational states 107
Pew Foundation 10
philosophy of teaching 31–3
The Physics Teacher 3, 83
Physics Teacher Education Coalition 82
Plato 8
Plumlee, E. L. 106
POD (Professional and Organization Network in Higher Education) 184
poetry reading 131
PPD (Pre-Post Design) 122–3, 164
practice exams 108
predictions of success, students 105
Preobservation Conference Form 53
Preparing Future Faculty initiative 23
Pre-Post Design (PPD) 122–3, 164
primary trait scoring (PTS) 64–5
probabilities 156–7
professional development programs 188
 see also continuing professional development
Professional and Organization Network in Higher Education (POD) 184
programming initiatives 183–91
promotion 17, 19–20, 171
PRS (personal response systems) 87
psychological factors 102–3, 119–20
psychology research ix
PTS (primary trait scoring) 64–5
p-value 156–7

qualitative research 147–9, 150, 159–61
quantitative research 147–9, 150
questions
 assessment tools 73–5
 generating 108
 for multiple-choice exams 127–8, 128
Quintilian 8

ratio scales 151
reading
 assessments 130–1
 effectiveness 117–18
 metacognition 131
 prior knowledge 118
 study skills 102–3
Reflective Judgment Model 93
Reisberg, D. 79
Relativistic Thinking 93
remembering: *see* memory
Repeated Measure Design (RMD) 122, 155, 156
research
 beneficence 140
 design of 120–5
 developing ideas and questions 72–3
 justice 140–1
 respect for persons 139–40
 and teaching compared 5
 see also ethical standards
Research Act 72
Research Ethics IRB Subcommittee 132
Research Governance Framework for Health and Social Care 137
research participants 139–40
resources, institutional 33–4
respect for persons 139–40
response to student concerns 49–50
results-focused approach 75
Rice, J. M. 8–9
Rice, R. E. 5
Richlin, L. 14, 88
 Blueprints for Learning 42

- Rinaldi, C. 92
RMD: *see* Repeated Measure Design
Roche, L. A. 45
Rohrer, D. 87
Rubistar website 62, 64, 130
- SAS (Statistical Analysis Software) 160
Savory, P. 88
Scaled-Rating Forms 56–9
Schoenfeld, A. H. 106
scholarly teaching 2, 14–15, 193
scholarship
 faculty 182
 integration/application/teaching 178
 learning 127
 standards 194
 teaching 5–6, 193
scholarships 175
Schwab, J. 8
Schwartz, B. 79
Seldin, P. ix, 68–9
selecting main ideas scale 112
selective attention 143
self-appraisal 107, 143
self-efficacy 107, 119, 143
self-explanation strategies 108, 142
self-management 107, 143
self-reflection 31–2
self-scorable worksheet 39–42
self-testing 103, 108, 112
semester-to-semester comparisons
 121–2
sensory learning 110
Serra, M. 105
Shulman, L. S. 6, 10, 21, 193, 194
significance, statistical 146–7, 165, 167
Slate, J. R. 113
slide copies, pre-lecture 87, 124
Small Group Instructional Diagnosis
 59
Smallwood, B. 96
Socratic method of learning 92–3
Sorcinelli, M. D. 178, 179, 180
SoTL (Scholarship of Teaching and Learning) viii, 2, 4
 administrators 194, 201–2
 annual conferences 185
 challenges to be met 201–2
 conferences 82–3
 establishing a center 170–4
 funding sources 200
 human research participants 131–2
 Impact Survey Questions 197–8
 involvement motivation 183
 IRB Procedures 133–7
 journals 84–6
 new faculty 22–3
 resistance to 16
 support/funding sources 199–200
 teaching hierarchy 13
 tenure 193–6
SPSS (Statistical Package for the Social Sciences) 156, 160–1, 162
Stanford University 5
statistical analysis
 assessment 149–51
 basics 145–7
 descriptive 151–3
 quantitative/qualitative 147–9, 150, 159–61
Statistical Analysis Software (SAS) 160
Statistical Package for the Social Sciences: *see* SPSS
statistical significance 146–7, 165, 167
Stenhouse, L. 7–8
Stevens, D. D. 130
student development 9, 118–19
Student Developmental Task Inventory 9
student engagement
 classroom survey 97–102
 learning 94–6
student evaluations 20–1, 44–6
“The Student Skills Inventory” 110

- students
- Dualistic 93
 - and faculty 95–6
 - feedback 60
 - learning 89, 90–1, 94–6
 - learning center 179
 - predictions of success 105
 - protection guidelines 135–6
 - responding to concerns 49–50
 - Uncertain 93
 - see also* learning
- study aids scale 112
- study selection 103
- study skills 102–3
- cognitively-based 103, 104
 - detriments to 114
 - exam performance 103–4
 - improving 118–19
 - knowledge 142
 - measures 103–4, 110–11, 113–18
 - metacognitive 103, 104
 - note-taking 102–3
 - online modules 118
 - psychological factors 102–3
 - reading 102–3
 - repetition-based 103, 104
 - techniques 116
- study skills classes 118–19
- Study-Habits Inventory* 110, 113
- Survey of Study Habits and Attitudes* 110
- Syracuse University 5
- Teacher Behavior Checklist (Buskist) 27, 27–9, 30–1, 33
- teacher research 6–8
- teachers 12, 30
- see also* Best Teachers (Bain)
- teaching
- educators 11–12
 - expert 37
 - by personal example 37
 - as research 181
 - and research compared 5, 11
 - scholarly 14–15
 - scholarship 5–6, 193
 - sincere 13–14
 - training in 187–8
 - see also* effectiveness of teaching
- teaching academy, University of Georgia 174
- Teaching Academy Teaching Program 22
- teaching and learning centers 169–70
- administrative support 194
 - director 180–1, 194–5, 202
 - goals 175–8
 - guidelines for good practice 178–83
 - names for 172–3
 - needs 174–5
 - programming initiatives 183–91
 - programming titles 188–90
 - training in teaching 187–8
 - websites 185, 205–6
- teaching assistants 187
- teaching excellence 171, 175
- teaching goals
- determining 38–9, 39–41, 42
 - and learning goals 87–8
- Teaching Goals Inventory 39, 39–42
- teaching inventories 34, 35–8
- Teaching Mathematics and Its Applications* 83
- Teaching of Psychology* 4
- Teaching Philosophy* 3, 83
- teaching portfolios 17, 68–70, 190
- Teaching Sociology* 3
- teaching strategies 21, 25, 78–81
- teaching style 74
- Teaching Style Inventory* (Grasha) 34, 35–8
- teaching-focused programs 188–9
- technology-focused programs 189–90
- tenure 17, 19–20, 171, 193–6

- test prediction accuracy 105–6
test strategies scale 112
thinking
 cognitive science 24–5
 evaluating 106–7
 monitoring 104–5
Thompson, S. B. 73
time management 103, 111
Tkacz, S. 108
training for graduate students 187
Tri-Council Policy Statement 137
t-test 155–6
Tversky, A. 80
Tweed, R. G. 92
two-factor test 166–7
Type II errors 158
- understanding 80–1, 110, 131
United States Department of Health
 and Human Services 72
University 101 courses 118–19
University of California System 5
University of Georgia 174
University of Wisconsin, Green Bay
 (UWGB) 171
University of Wisconsin System 132,
 196
UWGB (University of Wisconsin,
 Green Bay) 171
- Vasquez, K. 91–2
verbal protocol analysis 117
Vice President for Academic
 Affairs 175
videotapes of teaching 73
Vivres, Juan Luis 8
- Walvoord, B. E. 64
Washington University 59
Weimer, M. 3, 10, 88
Weinstein, C. E. 111, 111–12
Wiggins, G. viii, 42, 75, 76–8
within-semester comparisons
 122–5
Wood, P. 9
Wrenn, C. G.: *Study-Habits Inventory*
 110
Wright, D. L. 172–3
- Zhao, C. M. 22