ACCOUNTABILITY: accepting, for one's own answer, 32–33; anxiety, 31–32; attempts to avoid, 33–36; as conceptual bridge between student and team, 29–39; creating, 89–90; student, 11
Active listening, 63–66
Allen, E., 87
Ammons, J. L., 74, 76
Anderman, L. H., 29
Application exercises, 97–98
Assignments, 12
Awalt, C., 5, 87

Backward design, 13
Bailey, J. H., 44
Baldwin, T. T., 46
Baylor Medical College, 46
Bedell, M. D., 46
Bereiter, C., 10
Beretvas, S. N., 29
Birmingham, C., 11
Black, R. H., 10, 23, 36, 37, 91
Bligh, D. A., 42
Bodmann, S. M., 80
Boekart, M., 29–30
Booker, K., 29
Boonshoft School of Medicine (Wright State University), 48
Boud, D., 70
Bradley, A., 46
Branford, J. D., 44
Brindley, C., 70–72
Brobeck, F. C., 10
Brooks, C. M., 74, 76
Bruning, R. H., 11
Burris, J., 10

Cestone, C. M., 5, 69
Chan, C., 10
Chehab, E., 29
Chen, Y., 70, 72
Cheng, W., 70
Clements, D. H., 29–30
Cohen, R., 70
Communication skills, 43
Competencies: cultivating, 42–45; defined, 42; teaching, 56–60
Content learning, reinforcing, 22–23
Coregulated learning, 35–36
Cottell, P. G., 7
Coverdale, J. H., 43, 46
Cragin, J. P., 17, 57
Critical thinking, 43–44
Culminating project, 98
Davis, E. A., 10
Decisional questions, 62–63. See also ORID model
DeFouw, D., 46
Depth, versus breadth (curriculum development projects), 44–45
Derek Bok Center for Teaching and Learning, 29
Dochy, F., 70–72
Dominick, P. G., 72
Donne, J., 29
Dunaway, G. A., 46
Dunlosky, J., 36
Dweck, C. S., 31
El Paso, Texas, 90
El Paso-Juarez border area, 90
Elliot, A., 70, 71
Ewers, T., 70–71
Falchikov, N., 70, 73
Feedback: frequent immediate student, 11; instructor, 19; preparing learners for, 73–74; as teaching activity, 98
Festinger, L., 29
Fiechtner, S. B., 10
Fink, L. D., 1, 7, 12, 17, 21, 23, 24, 37, 38, 42, 56–58, 69, 70, 72–75, 87
Four S's, 20, 90–92
Freeman, M., 87, 88
Freeman, T. M., 29
Freire, P., 42
Freud, S., 29
Froese, T., 44–47
“Gallery walk,” 83
Gatfield, T., 71
Gelula, M. H., 59
Goldfinch, J., 70, 73
Gollakota, K., 71
Govaerts, M.J.B., 42
Grades, 48; alleviating student concerns about, 16; and designing grading system, 15, 97; translating comments into, 84
Group application, 50–51
Group assignments, keys to creating effective, 20
Group cohesiveness, minimizing barriers to, 10
Groups: forming, 16, 97; and group learning, 42–47; properly formed and managed, 10
Gueldenzoph, L. E., 73

Haberyan, A., 73
Hacker, D. J., 36
Haidet, P., 43, 44, 46, 74
Harasim, L., 89
Hattie, J., 11
Hernandez, S. A., 24
Higher-level learning, 20–22
Hiltz, S. R., 89
Hodgson, A. J., 46–47
Hudes, P. D., 46
Hung, W., 44
Hunt, D. P., 43, 46

IF-AT. See Intermediate feedback assessment technique (IF-AT)
Individual readiness assurance test (iRAT), 17, 18, 70, 80, 81, 88, 90
Inert knowledge, 13
Intermediate feedback assessment technique (IF-AT), 17, 18, 81; problems with, 79–80
Interpretive questions, 62. See also ORID model
iRAT. See Individual readiness assurance test (iRAT)

Janssens, S., 72
Jaques, D., 58, 59
Jensen, J. M., 29
Jensen, M.A.C., 10
Johnson, D. W., 7, 29–30, 43
Johnson, J. L., 46
Johnson, R. T., 7, 29–30, 43
Jonassen, D. H., 44
Kelly, P. A., 46
Knight, A. B., 1, 12, 17, 19, 21, 23, 24, 37, 38, 56–58, 69, 70, 72, 74, 75, 87
Koles, P., 44–46, 51, 75
Kulik, C. C., 11
Kulik, J. A., 11
Kumar, K., 10
Lane, D. R., 5, 47, 51, 55, 69, 70, 72, 74, 75
Leaving College: Rethinking the Cause and Cures of Student Attrition (Tinto), 29
Lerner, J. S., 11, 30, 31
Levine, R. E., 3–5, 69–75
Lifelong learning, 45
Lou, H., 72
Lynn, D. J., 74

“Making Feedback Helpful” (Journal of Management Education), 51, 84
Markel, S., 88
May, G. L., 73
Mayer, R. E., 21
Mayrath, M., 80
McConnell, D., 90
McCord, M., 11, 14
McGourty, J. W., 72
McGrath, J. E., 10
McKeachie, W. J., 42
McMahon, K. K., 3–4, 60
McTighe, J. H., 13
Member resources, distributing, 10
Metacognition, 44
Meyer, K. A., 88–89
Michaelsen, L. K., 1, 3–4, 7, 10, 12, 14, 16, 17, 21–24, 36–38, 46, 48, 51, 56–58, 69–76, 80, 83, 84, 87, 91
Miller, J. A., 14
Millis, B. J., 7
Minnaert, A., 29–30
Natasi, B. K., 29–30
Netiquette, 93
Nieder, G. L., 46

Objective questions, 61. See also ORID model
O’Boyle, M., 74
ORID model, 60–63, 65–66
Ostafichuk, P. M., 46–47, 51
Palloff, R. M., 88
Palsolé, S., 5, 87
Paniagua, F. A., 74
Parmelee, D. X., 3–4, 41, 45, 46, 51
Paswan, A. K., 71
PBL. See Problem-based learning (PBL)
Peer assessment and evaluation, 2, 38, 50–51, 98–99; anonymous versus
owned, 74; critical role of, 24; guidelines for implementing, 72–74; instruments and approaches for, 74–75; pedagogical merits of, 70–71; student perceptions of, 71–72; in team-based learning, 69–79
Peer Evaluations Web site (teambased-learning.org), 72, 75
Pelley, J. W., 60
Pelton-Sweet, L. M., 4, 29
Periodic formative assessments, 73
Personal instructor characteristics, 66–68
Pintrich, P. R., 21
Pittman, L. D., 29
PowerPoint, 82–83
Pratt, K., 88
Problem solving, 43–44
Problem-based learning (PBL), 45–47
Professional education, 42–45; enhancing, with team-based learning, 41–52; growth of team-based learning in, 46–47; what small group learning brings to, 42–45
RAP. See Readiness assurance process (RAP)
RATs. See Readiness assurance tests (RATs)
Readiness assurance, 49–50
Readiness assurance process (RAP), 8, 12, 17, 91; summary of, 19–20
Readiness assurance tests (RATs), 37, 38, 49–50, 90; overuse of, 2; technological alternatives in, 79–82
Reflective questions, 61–62. See also ORID model
Reilly, R. R., 72
Resources, teaching activity, 99
Richards, B. F., 43, 45–46
Robinson, D. H., 5, 79–81
Ronning, R. R., 11
Ryan, T. E., 45
Salmon, G., 89
Sampson, J., 70
Scandura, J. M., 21
Schelhout, W., 72
Schraw, G. J., 11
Schultheiss, E. E., 16, 51, 76, 84
Schatz, W., 29
Scoffield, S., 70–72
Seaman, J., 87
Searby, M., 70–71
Searle, N. S., 46
Segers, M., 70, 71
Sharp, W., 23
Shrader, C. B., 58
Sibley, J., 4, 41
Simpson, J. A., 10
Sloan Consortium, 87
Sluijsmans, D., 70, 71
Small group learning, 42–45; contribution to professional education, 42–45; team-based learning as powerful form of, 45–47
Smith, E. F., 70–71
Smith, K., 7, 29–30
Socratic Method, 47
Sparke, W., 21
Stanfield, R. B., 60
Stolfi, A., 45, 46, 51
Stone, M. M., 74
Student resistance, 57
Student-centered learning, creating climate for, 56–57
Summers, J. J., 29
Svinicki, M. D., 29, 37
Swanson, I., 70, 71
Sweet, M. S., 4, 7, 16, 22, 29, 56, 80, 83
TBL. See Team-based learning (TBL)
Teaching activities: at beginning of course, 97; during course, 97–98; at end of course, 98–99
Team readiness assessment test (tRAT), 30, 31, 49, 88–90
Team-based learning (TBL): benefits of, 24–25; broad overview of, 7–8; enhancing professional education with, 41–52; essential elements of, 7–25; expanded use of, 3–4; four essential elements of, 8–12; growth of, in professional education, 46–47; implementing, 12–25; implementing, in professional school settings, 47; in instructional technology, 4; in international settings, 4; introducing students to, 12–16; as powerful form of small-group learning, 45–47; versus problem-based learning, 45–47; in professional schools, 3; social foundation of, 29–39; teaching activities for, 97–99; and team-based instructional activity sequence, 9; what is not, 1–3
Team-based learning, in asynchronous online settings: and creating accountability, 89–90; and creating teams, 89;
and equivalencies of face-to-face to online class activities, 88; next steps for, 94; outcomes, 92–93; setup for, 89–92; and student performance, 92; and student retention, 92

Team-based learning, teaching skills for facilitating: and active listening, 63–66; and creating climate for student-centered learning, 56–57; and facilitation strategies, 60–66; and focusing conversations using four-stage process, 60–63; and guiding learners through own discovery, 59; and maintaining credibility without excessive lecturing, 58; and personal instructor characteristics, 66–68; and responding to individual student need, 58–59; and student perceptions that they are teaching themselves, 57–58; and student resistance, 57; and teaching competencies, 56–60; and using within-group strategies to prime pump, 59–60

Team-based learning, technological alternatives in: and problems with paper tests and IF-ATs, 79–80; and providing feedback on peer evaluations, 83–84; and readiness assurance tests, 79–82; and reporting complex team assignments, 82–83

Teams: and awareness of teammate judgments, 31–32; composition of, 48; and encouraging development of positive team norms, 24; learning value of, 23; and recognizing effective team interaction, 23–24; valuing, 43

Thackeray, R., 72
Thinking backwards, 13
Timperley, H., 11
Tinto, V., 29
Topping, K., 71, 73
tRAT. See Team readiness assessment test (tRAT)
Tuckman, B. W., 10
Tukey, J. W., 82
Turoff, M., 89
Type 3 concurrent verbalization, 36

University of British Columbia: Engineering school, 44–47, 51; Medical School, 46
University of Kentucky, 46, 47
University of Oklahoma, 46
University of Texas, 80
University of Texas, El Paso, 87, 89, 90
U.S. Department of Education, 46
Vasan, N. S., 46

Walker, J. D., 5, 79
Warren, M., 70
Watson, W. E., 10, 17, 23, 36, 37, 57, 58
Weeks, W., 46
Wheeler, M. L., 72
Whitehead, A., 13
Wiggins, G., 13
Wolf, D. V., 74
Wood, W., 10
Worchel, S., 10
Wright, C., 22, 83
Wright State University, 48, 51
Yerkes-Dodson curve, 37
Yost, S. A., 47, 51