TABLE OF CONTENTS

Educational Principles and Practice in Veterinary Medicine

List of Contributors

Preface

1 Educational Philosophy and Philosophers 1
Katherine Fogelberg and Ying Wang

Section 1: Introduction and Overview 1

Section 2: A Brief History of Western Educational Philosophy 3

Section 3: The Eastern Origins of the Philosophy of Education 6

Section 4: Ethics and Aims of Education 11

Section 5: Educational Philosophers of Note 14

Section 6: Teacher-Centered Educational Philosophies: Perennialism and Essentialism 16

Section 7: Learner-Centered Educational Philosophies: Pragmatism and Existentialism 20

Section 8: Socially-Centered Educational Philosophies: Behaviorism and Reconstructionism 25

2 Educational Theory and Theorists 35
Katherine Fogelberg, Kimberly S. Cook, Freyca Calderon, and Karla O'Donald

Section 1: Introduction 35

Section 2: The Big Three and Their Other Sibling 37

Section 3: Educational Equity: The Classroom as an Equalizer 60

3 Cognition and Learning 79
Peter Doolittle and Meghan Byrnes

Section 1: Introduction 79

Section 2: Social Cognitive Theory 81

Section 3: Learning, Memory, and Cognition 96

4 Andragogy 133
Katherine Fogelberg

Section 1: Introduction 133

Section 2: A Very Brief History of Pedagogy 133

Section 3: History and Emergence of Andragogy 134

Section 4: Features and Foundations of Knowles's Andragogy 136

Section 5: Challenges to Andragogy 138

Section 6: Support of Andragogy 139

Section 7: Applications to the Veterinary Classroom 142

5 Understanding the Professional Program Student 145
Bobbi J. Conner, Lawrence Garcia, and Matthew Schexnayder

Section 1: Introduction and Overview 145

Section 2: Who Are Our Students? 145

Section 3: Neurodivergence 153

Section 4: Personality Types 157

Section 5: How Our Students Fit into Our Structures 159

Section 6: Expectations 161

Section 7: Student Factors 162

Section 8: Practical Tips for Safely Incorporating Failure into Veterinary Education 163

6 Roles of the Professional Program Instructor 169
Philippa Gibbons, Dawn M. Spangler, Lynda M.J. Miller, Erik H. Hofmeister, Lisa M. Greenhill, Sraavya M. Polisetti, Kendall P. Young, Shelly Wu, Gabriel Huddleston, Ryane E. Englar , Micha C. Simons, and Stephanie Thomovsky

Section 1: Classroom Learning 169

Section 2: Laboratory and Clinical Skills Instruction 175

Section 3: Teaching Personal Finances 179

Section 4: Including Cultural Humility, Cultural Competency, and Cultural Fluency in the Veterinary Medical Curriculum 181

Section 5: Teaching Empathy and Ethics 187

Section 6: Teaching and Practicing Foundational Communication Skills 189

Section 7: Teaching on the Clinical Floor – Veterinary Students and House Officers 200

7 Technology in the Classroom 223
Shane M. Ryan, Sarah A. Bell, Micha C. Simons, and Sarah Baillie

Section 1: Introduction 223

Section 2: Presenting Information and Interactions with Content 224

Section 3: Online and Blended Learning 227

Section 4: Instructional Systems Design for Digital Learning 232

Section 5: Veterinary Student Success in Technology-Enhanced Learning 236

Section 6: Safety and Security Considerations 239

Section 7: Present and Future Technologies to Enhance Learning 243

Section 8: Common Forms of Educational Technologies 243

Section 9: Review of Examples of Technologies Used in Veterinary Education 244

8 The Syllabus 251
Katherine Fogelberg

Section 1: Introduction 251

Section 2: Syllabus Purposes 251

Section 3: Creating an Effective Syllabus 256

Section 4: The Syllabus as a Tool to Document Scholarship in Teaching and Learning 259

9 Assignments and Rubrics 263
Jo R. Smith

Section 1: Assignments 263

Section 2: Rubrics 265

10 Assessing Student Learning: Exams, Quizzes, and Remediation 287
Kimberly S. Cook, Katherine Fogelberg, Patricia Butterbrodt, Katrina Jolley, Malathi Raghavan, and Jo R. Smith

Section 1: Formative Versus Summative Assessments and the Role of Evaluations 287

Section 2: Writing Good Exam Questions 292

Section 3: Exams and Quizzes: Determining Validity and Reliability 300

Section 4: Remediation 304

11 Assessing Clinical Skills 313
Stephanie L. Shaver

Section 1: Introduction 313

Section 2: Performance Assessment 313

Section 3: Workplace-Based Assessment 318

Section 4: Essential Concepts in Clinical Skills Assessment 321

12 Different Approaches to Assessment 329
Erik H. Hofmeister

Section 1: Introduction and Approaches 329

Part 12: Audio and Video Options 340

Section 2: Implementing New Assignments 340

Section 3: Novel Grading Schemes 341

Section 4: Implementing Novel Grading Schemes 343

13 Program Outcomes 349
Patricia Butterbrodt and Katrina Jolley

Introduction 349

Section 1: Curriculum Mapping 349

Section 2: Accountability in Assessment Outcomes 358

Section 3: Ensuring Students Meet Benchmarks for Student Learning 359

Section 4: Tracking Student Outcomes 361

14 Mentoring Students 367
Micha C. Simons, Stephanie Thomovsky, Julie A. Hunt, and Katrina Jolley

Section 1: Veterinary Student Mentorship 367

Section 2: Mentoring Students in Educational Research 370

Section 3: Cheating and Other Unethical Student Behavior 373

15 Educational Development 383
Jesse Watson and Sherry A. Clouser

Section 1: Introduction 383

Section 2: Educator Development 386

Section 3: Building an Educator Development Program 389

Section 4: Recommendations for Success 394

16 Documenting Teaching for Career Advancement 399
Misty R. Bailey and Susan M. Matthew

Section 1: Introduction 399

Section 2: Teaching 401

Section 3: Mentoring and Advising 406

Section 4: Learner Assessment or Outcome Assessment 406

Section 5: Educational Research and Scholarship 407

Section 6: Curriculum and Program Development 409

Section 7: Educational Leadership and Administration 410

Section 8: Institutional and Administrative Support for Teaching for Career Advancement: A Case Study 410

Section 9: Summary 411

17 Educational Research 415
Jill R. D. MacKay and Shelly Wu

Section 1: Introduction to Educational Research 415

Section 2: Designing the Educational Research Study 420

Section 3: Collecting Data 433

Section 4: Analyzing Data 440

Section 5: The Ethics of Educational Research 443

Section 6: Reporting the Educational Study 448

18 Building Bridges Between Research and Practice 459
Julie A. Hunt

Section 1: Introduction 459

Section 2: Educational Theory's Impact on Veterinary Educational Research 460

Section 3: How Educational Research Can Increase its Impact on Educational Practice 461

Section 4: Educational Research Challenges 463

Section 5: Barriers to Changing Educational Methods 464

Section 6: How Educational Research Has Changed Veterinary Education Practices 465

19 History and Purpose of Higher Education 471
Donald B. Mills and Kimberly S. Cook

Section 1: Introduction 471

Section 2: Brief History of Higher Education in the United States 471

Section 3: Specialized Institutions 475

Section 4: Students 476

Section 5: Purpose 477

20 Private and Public Institutions 479
Kimberly S. Cook and Donald B. Mills

Section 1: Introduction 479

Section 2: Public Institutions 479

Section 3: Private Institutions 484

Part 4: Governance and Operations Structure 486

Section 4: Contemporary Issues 486

21 Higher Education Policies 491
Patricia Butterbrodt

Section 1: Introduction 491

Section 2: University Policy Areas 493

Section 3: Faculty Responsibility to Policy 495

Section 4: Summary 498

22 Leadership in Higher Education 501
Erik H. Hofmeister

Section 1: Introduction 501

Section 2: Principles of Leadership 502

Section 3: Leadership Education 504

23 Accreditation: What It Is and Why It Is Important 513
Myrah Stockdale, Malathi Raghavan, and Stacy L. Anderson

Section 1: Overview 513

Section 2: Abbreviated History of Accreditation in the United States 515

Section 3: History of Accreditation in Veterinary Education 516

Section 4: Accrediting Bodies 517

Section 5: International Accreditation 519

Section 6: Accreditation of Veterinary Education Worldwide 521

Section 7: The Process of Accreditation 524

Section 8: Additional Considerations 537

24 Leaving Thoughts and the Future of Veterinary Education 545
Katherine Fogelberg

Section 1: Introduction 545

Section 2: The Power of Veterinary Medical Education 546

Section 3: Moving Veterinary Education Forward 551

Section 4: Conclusion and Leaving Thoughts 558

References 558

Index.