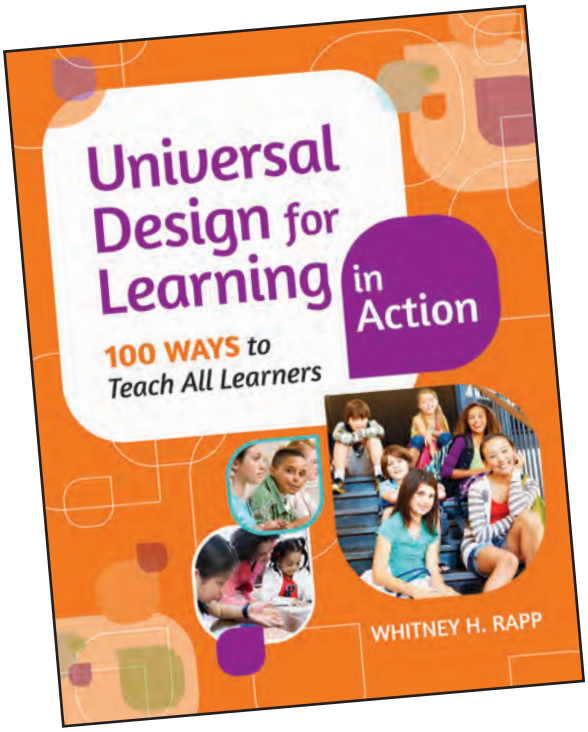
Thank you for downloading a free excerpt from



Universal Design for Learning in Action

100 Ways to Teach All Learners

$34.95 | Stock # 73909 | 2014
224 pages | 8.5 x 11 | paperback

For more information or to purchase visit,

http://www.brookespublishing.com/universal-design-for-learning-in-action

Connect with us online

and get access to exclusive ***FREE*** content and special offers!

- @BrookesPubCo
- www.facebook.com/brookespublishingco
- http://pinterest.com/brookespubco
- www.youtube.com/BrookesPublishing
- http://www.brookespublishing.com/about-us/newsletters

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

Universal Design for Learning in Action

100 Ways to Teach All Learners

by

Whitney H. Rapp, Ph.D.
St. John Fisher College
Rochester, New York

PAUL H. BROOKES PUBLISHING CO.®

Baltimore • London • Sydney

Excerpted from Universal Design for Learning in Action: 100 Ways to Teach All Learners
by Whitney H. Rapp, Ph.D.
Brookes Publishing | www.brookespublishing.com | 1-800-638-3775
© 2014 | All rights reserved

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

Contents

About the Author ix
Acknowledgments xi

Section I Overview

Foundational Theories 2
How Do All of These Foundational Theories Fit Together? 11
What Does This Book Add to All of These Theories? 12
Addressing Barriers and Misconceptions 13
Format of the Book 15

Section II Strategies for Engagement

Providing Multiple Means of Engagement 18
Considerations 19
Engagement Through Space: Bulletin Board Borders 21
Engagement Through Space: Seating 22
Engagement Through Space: Lighting 24
Engagement Through Materials: Fidget Toys 25
Engagement Through Materials: Professional Equipment 26
Engagement Through Materials: Writing Surfaces 27
Engagement Through Classroom Management: Jobs 29
Engagement Through Classroom Management: Meetings 31
Engagement Through Classroom Management: Smarty Pants 33
Engagement Through Classroom Management: Organized Classroom 35
Engagement Through Technology: Interactive Whiteboards 37
Engagement Through Technology: Videoconferencing 39
Engagement Through Technology: Blogs 40
Engagement Through Content Instruction: Tactile Activities 42
Engagement Through Content Instruction: Bag of Writing Ideas 44
Engagement Through Content Instruction: Mnemonics 45
Engagement Through Content Instruction: Computer Software Programs 46
Engagement Through Social Interaction: Games 47
Engagement Through Social Interaction: Grouping 48

© 2014 | All rights reserved

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

Engagement Through Social Interaction: Dice 49
Engagement Through Social Interaction: Redefine Bullying 50
Engagement Through Executive Functions: Using the Arts 52
Engagement Through Executive Functions: Cue Signals 54
Engagement Through Executive Functions: Minecraft Video Game 56
Engagement Through Transition to Adulthood: Bingo 57
Engagement Through Transition to Adulthood: Real-Life Situations 58
Engagement Through Transition to Adulthood: Invite People to Meetings 60

Section III Strategies for Input

Providing Multiple Means of Input 62
Considerations 63
Input Through Space: Food, Drinks, and Gum 66
Input Through Space: Nooks 68
Input Through Materials: Visually Accessible Text 69
Input Through Materials: Auditory Books 70
Input Through Materials: Tactile Books 71
Input Through Materials: Self-Amplifiers 72
Input Through Classroom Management: Schedules 73
Input Through Classroom Management: Syn-naps 74
Input Through Classroom Management: 10:2 Theory 75
Input Through Technology: FM-Adapted Computer Stations 76
Input Through Technology: Digital Text or E-books 77
Input Through Technology: Note-Taking Hardware and Software 79
Input Through Technology: Access to Auditory Input 81
Input Through Technology: Access to Visual Input 83
Input Through Content Instruction: Peer-Mediated Instruction 85
Input Through Content Instruction: Study Snippets 86
Input Through Content Instruction: Responsive Resource Posters 87
Input Through Content Instruction: Humor 88
Input Through Content Instruction: Visualizing 89
Input Through Content Instruction: Continuum of Abstractness 90
Input Through Content Instruction: Accessible Presentation Software 91
Input Through Social Interaction: Social Stories 93
Input Through Social Interaction: Social Skill Autopsy 94
Input Through Social Interaction: Gaming Technology 95
Input Through Executive Functions: Planner Options 97
Input Through Executive Functions: Web-Based Materials and Information 99
Input Through Executive Functions: Graphic Organizers 101
Input Through Executive Functions: Timers 103
Input Through Transition to Adulthood: Resource Ring 105
Input Through Transition to Adulthood: A-to-C Chart 106
Input Through Transition to Adulthood: Visual Goal Plan 108

Section IV Strategies for Output

Providing Multiple Means of Output 110
Considerations 111
Output Through Space: Mobility Supports 114
Output Through Space: Student-Created Bulletin Boards 116

Excerpted from Universal Design for Learning in Action: 100 Ways to Teach All Learners
by Whitney H. Rapp, Ph.D.
Brookes Publishing | www.brookespublishing.com | 1-800-638-3775
© 2014 | All rights reserved

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

Output Through Materials: Coded Assignments ... 117
Output Through Materials: Supports for Interactive Whiteboards ... 118
Output Through Materials: Writing Supports ... 120
Output Through Materials: Universal Tools ... 122
Output Through Classroom Management: Integrative Movement ... 123
Output Through Classroom Management: Transition Areas ... 125
Output Through Classroom Management: Coded Classroom ... 127
Output Through Technology: Photo Essay ... 128
Output Through Technology: Universal Computer Equipment ... 129
Output Through Technology: Communication Supports ... 130
Output Through Content Instruction: Graph Paper ... 132
Output Through Content Instruction: Socratic Seminars ... 134
Output Through Content Instruction: Student Recordings and Videos ... 135
Output Through Content Instruction: Prequestions ... 137
Output Through Content Instruction: Reading Reflection Cards ... 138
Output Through Content Instruction: Music ... 139
Output Through Content Instruction: Drawing ... 140
Output Through Social Interaction: Response Scales ... 141
Output Through Social Interaction: Mix-Freeze-Pair ... 143
Output Through Social Interaction: Rally Table ... 144
Output Through Executive Functions: Rubrics ... 145
Output Through Executive Functions: Templates ... 146
Output Through Executive Functions: Visual Reminders ... 148
Output Through Transition to Adulthood: Visual Presentation of Goals ... 149

Section V Strategies for Assessment

Providing Multiple Means of Assessment ... 152
Considerations ... 153
Assessment Through Testing: Adapted Tests ... 157
Assessment Through Testing: Retesting ... 159
Assessment Through Testing: Computer Practice Tests ... 160
Assessment Through Testing: Activities with Products ... 161
Assessment Through Testing: Entry and Exit Responses ... 162
Assessment Through Homework: CHOICE! ... 163
Assessment Through Homework: Family Projects ... 165
Assessment Through Homework: Peer Groups ... 167
Assessment Through Performance Assessment: Family Message Journals ... 169
Assessment Through Performance Assessment: Solving Real-World Problems ... 170
Assessment Through Portfolio Assessment: Ability Profiles ... 172
Assessment Through Portfolio Assessment: Responsive Report Cards ... 174
Assessment Through Self-Evaluation: "I Can…" Sheets ... 175
Assessment Through Self-Evaluation: Learning Logs ... 176
Assessment Through Self-Evaluation: IRS Questions ... 178
Assessment for Self-Evaluation: Three Cups ... 179

Section VI A Living Resource

Reflections for Additional Strategies ... 182
Theory Books ... 183
Strategy Books and Materials ... 184

Excerpted from Universal Design for Learning in Action: 100 Ways to Teach All Learners
by Whitney H. Rapp, Ph.D.
Brookes Publishing | www.brookespublishing.com | 1-800-638-3775
© 2014 | All rights reserved

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

First-Hand Narratives....185
Web Sites....185

References....195
Index....199

Excerpted from Universal Design for Learning in Action: 100 Ways to Teach All Learners
by Whitney H. Rapp, Ph.D.
Brookes Publishing | www.brookespublishing.com | 1-800-638-3775
© 2014 | All rights reserved

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

About the Author

Whitney H. Rapp, Ph.D., Associate Professor of Inclusive Education, St. John Fisher College, 3690 East Avenue, Rochester, New York 14618

Dr. Rapp is Associate Professor of Inclusive Education at St. John Fisher College, where she teaches courses on inclusive education pedagogy, assessment, classroom management, and diversity issues. Dr. Rapp holds a bachelor's degree in elementary education and psychology from the State University of New York at Potsdam and master's and doctoral degrees in special education from Michigan State University. Prior to her experience in teacher education, Dr. Rapp taught many grade levels in a variety of settings, from fully inclusive classrooms to residential special education schools. All of these experiences reinforced her belief that all children can learn and that all children should learn together in inclusive settings. Dr. Rapp's current research interests include universal design for learning throughout the school years and college. She is the coauthor of the textbook *Teaching Everyone: An Introduction to Inclusive Education* (coauthored with K.L. Arndt; Paul H. Brookes Publishing Co., 2012), and she presents at local, state, national, and international conferences on differentiation of instruction, teacher education, and inclusion. She serves on the Board of Directors of TASH. Dr. Rapp's spare time is spent with her husband and three children, riding bikes, hiking, playing board games, reading, watching movies, and enjoying Owasco Lake.

© 2014 | All rights reserved

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

SECTION II

Strategies for Engagement . . .

Through Space 21
Through Materials 25
Through Classroom Management 29
Through Technology 37
Through Content Instruction 42
Through Social Interaction 47
Through Executive Functions 52
Through Transition to Adulthood 57

Excerpted from Universal Design for Learning in Action: 100 Ways to Teach All Learners
by Whitney H. Rapp, Ph.D.
Brookes Publishing | www.brookespublishing.com | 1-800-638-3775
© 2014 | All rights reserved

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

PROVIDING MULTIPLE MEANS OF ENGAGEMENT

UDL includes many different ways to engage students in learning. Each student is unique in his or her learning style, abilities, and ways of engaging in various learning opportunities. Some prefer working alone, whereas others prefer group work. Some prefer open-ended, highly subjective tasks, whereas others prefer structured, objective tasks. To increase engagement, teachers need to catch students' interest, as well as help them sustain effort and persist toward a goal, and self-regulate their learning behaviors (National Center on Universal Design for Learning, 2011).

To set the tone for effectively engaging students, it is important to decrease discomfort and distractions. Some students can focus their attention easily on a given task, whereas others have more difficulty filtering out distractions in the environment, some of which may cause discomfort or distress. There are many factors involved here to make sure the classroom is physically and emotionally comfortable. Physically, the temperature should be moderate, the lighting should be adequate, and the furniture should be appropriate for all students' needs. Emotionally, the classroom should be supportive, free of ridicule and judgment, and encouraging. Each student should be urged to take risks but not forced out of his or her comfort zone, which is unique to each student.

Options for Catching Interest

One of the most effective ways to catch students' interests and encourage them to attend to important information is to provide choice and autonomy. Students can choose the process used to accomplish a task, the tools or materials used during the process, and the product they create to show their learning. Differentiated menus are an excellent example of offering choice to students. As long as the choices are appropriate—not too easy and not too challenging—providing choice increases interest and engagement.

Another important way to interest students is to offer relevant, valuable, authentic activities. Teaching them to work division problems in math for the purpose of completing a worksheet or test is not authentic. Bringing in a cake and teaching them to work a division problem so that each student receives an equal piece is relevant. Having students bring in real problems from home—How should the vegetable garden be divided? How can I double or halve a recipe? How much tile do I need to cover the bathroom floor?—and working out the problems to inform their families is valuable. Make sure activities are culturally relevant, as well as socially, developmentally, and individually appropriate.

Options for Sustaining Effort and Persistence

Once the teacher has a student's interest, it is important to help the student persevere in his or her efforts. Sustaining effort on a task can be increased by frequently revisiting the goals and steps toward the goal so that the student can strive for the goal. Varying resources and changing materials can refresh engagement. Fostering collaboration and communication through carefully structured groups helps students guide each other toward task completion. Providing frequent feedback and showing the student how much progress has been made demonstrates how far he or she has come and how much is left to do.

Options for Self-Regulation

For students to self-regulate their learning behaviors, they need to know what those behaviors are and how they can be improved. As a teacher, every time you find an effec-

Excerpted from Universal Design for Learning in Action: 100 Ways to Teach All Learners
by Whitney H. Rapp, Ph.D.
Brookes Publishing | www.brookespublishing.com | 1-800-638-3775
© 2014 | All rights reserved

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

tive strategy for a student, it is important that the student be made aware of the strategy and its positive effect. The more students know about their strengths, needs, and best strategies, the more they will be able to take charge of their own learning, including self-regulating their performance and progress. Areas in which a student should be self-aware include extrinsic (external) and intrinsic (internal) motivators, personal coping skills, self-assessment, and self-reflection. Some extrinsic motivators may be grades, prizes, or rewards (e.g., extra recess, computer time). Some intrinsic motivators may be pride in a job well done, excitement about the topic, or a feeling of being challenged. Coping skills that help students focus their attention or work through overwhelming situations include drawing or doodling, chewing gum, talking to a peer or counselor, and writing in a journal. Self-assessment and self-reflection are difficult to develop. It is not easy for people to step back, look at themselves objectively, and be honest and specific about how they are doing and how they can improve. Teachers can provide scaffolds that help students assess their own performance and reflect on ways to improve.

Fostering independence generally increases motivation and engagement. At any age, students are ready to take on a new task themselves. At 5 years old, it may be deciding which center to do first during independent work time. At 10 years old, it may be deciding which book to read for a book circle and developing discussion questions for the group. At 15 years old, it may be starting an extracurricular club and facilitating the meetings. The teacher's role is to scaffold and guide, not micromanage.

CONSIDERATIONS

There are several considerations to keep in mind when thinking about how to engage diverse learners.

Human Interests Are Unique and Dynamic

No two students are engaged the same way, even if they share commonalities. Not all students with autism, for example, are engaged in the same way, just as not all boys are engaged in the same way, and not all African American students are engaged the same way. Even identical twins have different perspectives and experiences that shape their unique interests. No two students are alike. Nor is any one student the same for very long. One thing this means for teachers is, essentially, that there is never a time for resting on your laurels. Once you have a great store of ways to catch your students' interests, you still need to keep looking for new ways to keep it fresh, novel, and age-appropriate. I do not have to tell you how quickly children grow and change.

Sustained Effort, Persistence, and Self-Regulation Depend on Many Variables

Willis (2006) described the role of emotion and stress in students' abilities to process information, sustain attention, plan and set goals, problem-solve, critically analyze, and evaluate outcomes. In either a stressed or a bored state, the part of the brain's limbic system called the amygdala shifts into overdrive. In this state, information is channeled into fight-flight-freeze mode in which little higher order processing is possible. It is important to maintain a balance between stress and boredom. Students need to be challenged but not frustrated, and they need to feel comfortable in a predictable environment without being bored. Many things, both physical and emotional, can cause stress. Although teachers cannot predict, plan, or prevent some of them (e.g., coming down with a cold, not getting

Excerpted from Universal Design for Learning in Action: 100 Ways to Teach All Learners
by Whitney H. Rapp, Ph.D.
Brookes Publishing | www.brookespublishing.com | 1-800-638-3775
© 2014 | All rights reserved

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

enough sleep, being excited or anxious about weekend plans, having a poor diet), we can be ready and make the classroom safe from other negative variables (e.g., fear of making a mistake in the classroom, lack of choice in assignment topics or peer partners, test anxiety, culturally irrelevant content).

How It All Comes Together

Engagement is one of the principles of UDL, but it is also prominent in the other foundational theories of this book. Tomlinson and McTighe (2006) included it in the WHERETO Framework of Understanding by Design. The acronym stands for

- *What* to learn
- How to *Hook* and engage learners
- How to *Equip* students
- Encouraging learners to *Rethink* previous learning
- Promoting self-*Evaluation*
- *Tailoring* learning activities
- *Organizing* learning for maximum engagement and effectiveness

Two important points included here are the value of hooking students with introductory activities that "itch" the mind and draw them into learning, and immersing students in challenging tasks and problems at first, rather than making them climb the lower rungs of the ladder mastering basic concepts first. Tomlinson and McTighe (2006) found that tapping students' interests and allowing them choice of authentic tasks increased their learning productivity. Culturally responsive teaching theory includes choice and authenticity as important for engaging students, as is inductive, interactive, and communal problem solving (Gay, 2010).

Research on brain-based learning indicates that our brains are structured to better remember novel or unexpected events. These types of events put our brains on alert, better focused on what is to come next (Willis, 2006). Once the novelty has hooked them, students need opportunities to interact with the new information to sustain their attention.

Last, an essential part of believing in one's individuality—a main concept of full citizenship in the classroom—is understanding that each person has his or her own interests and personality. Discovering those individualized interests and incorporating them into new learning is critical in creating a classroom that engages everyone.

Excerpted from Universal Design for Learning in Action: 100 Ways to Teach All Learners
by Whitney H. Rapp, Ph.D.
Brookes Publishing | www.brookespublishing.com | 1-800-638-3775
© 2014 | All rights reserved

Bulletin Board Borders

Place bold, distinct borders around bulletin boards and wall displays. Many teachers like to cover bulletin boards and classroom walls with displays of student work and decorations. This practice can help to create a shared space and to build classroom community. Sometimes, however, visual displays can be overwhelming to students who have difficulty processing a lot of visual stimuli. By placing a bold border that distinguishes the display from the background wall and from other displays, you can help students perceive each display as one piece instead of many pieces. In that way, the classroom can be engaging to all, while not overwhelming to some.

Try This

Messy bulletin board

Bulletin board with border

Why This Works

- **Research base.** It is based on neuropsychology research about figure–ground discrimination (National Center for Learning Disabilities, 2012).
- **Student involvement.** Students can evaluate displays for effectiveness, overstimulation, and engagement. Students can participate in creating displays and rotating work. Assigning someone to be the Bulletin Board Manager or Interior Decorator can be a classroom job.
- **Reasonable use.** It is simple, easy, and inexpensive for the teacher and/or students to implement.
- **Expectations maintained.** It makes the room more appealing yet not overstimulating. It does not lower expectations for knowledge or skill level for any student.
- **Equity and universality.** It recognizes diversity in the ways students are engaged and in the ways students process visual stimuli. All students can experience the visuals equitably without compromising the colorfulness or engaging quality of the classroom.

IF . . . THEN

If the material on the bulletin board is used for instructional purposes, and the students learn more from the visually distinctive display, then this can also be a strategy for **Input.**

INPUT

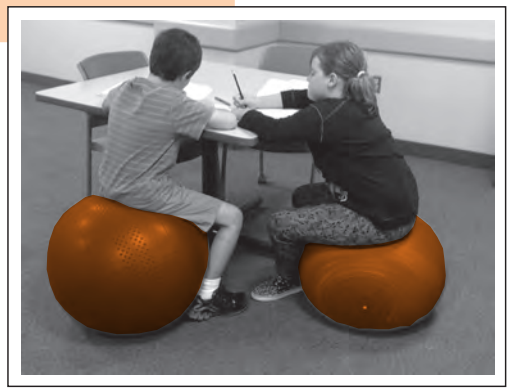
© 2014 | All rights reserved

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

Seating

Offer varied seating. An outdated belief is that in order to be engaged, a student must be sitting up straight in a chair, at a desk, with feet on the floor. Now we know that some students are more engaged when moving or standing. It is time to rethink seating in the classroom. Student desks and chairs may still work best for some, so they should continue to have their place—as long as they are adjustable—but more options need to be added. For example, using a stability ball instead of a standard chair turns a student desk into a newly engaging workspace. Bean bag chairs and yoga mats moved to quieter, more private areas of the classroom create a more relaxing space where some students are able to work longer and more efficiently. Small-group tables allow students to have company or collaborate in their work. Taller café tables allow students to stand and wiggle while engaged in tasks. In addition, seat cushions, supports, stools, and learning chairs are available.

Try This



Stability balls

Bean bags

Café table

Why This Works

- **Research base.** Comfortable, flexible seating in the classroom can increase engagement and motivation (Gargiulo & Metcalf, 2010).
- **Student involvement.** Students are able to explore and choose which furniture is most comfortable for them for various activities, which provides them opportunity to reflect on whether their level of engagement increases or decreases.
- **Reasonable use.** All of the seating variations mentioned are readily available. The cost may be considerable depending on the furniture.
- **Expectations maintained.** When the teacher believes that alternative seating can be used for learning and not just recreation, that belief is

Excerpted from Universal Design for Learning in Action: 100 Ways to Teach All Learners
by Whitney H. Rapp, Ph.D.
Brookes Publishing | www.brookespublishing.com | 1-800-638-3775
© 2014 | All rights reserved

FOR MORE, go to http://www.brookespublishing.com/universal-design-for-learning-in-action

passed to the students. Students are still expected to be engaged in the lesson and work and to use the furniture in a safe and respectful manner.

- **Equity and universality.** All seating variations must be available to everyone. Everyone in the classroom is entitled to a seat, so everyone should be entitled to a choice of seat.

IF . . . THEN

If stability balls, standing, and moving are used to benefit learning and behavior, as evidenced in multiple research studies (Kilbourne, 2009; Schilling, Washington, Billingsley, & Deitz, 2003; Shepard, 1997), then this can also be a strategy for **Input.**

INPUT

Excerpted from Universal Design for Learning in Action: 100 Ways to Teach All Learners
by Whitney H. Rapp, Ph.D.
Brookes Publishing | www.brookespublishing.com | 1-800-638-3775
© 2014 | All rights reserved