

**Course number:** PRDV 71827

**Title:** Move the Body, Engage the Brain

**Credit:** 1

**Location:** Online

**Visiting Instructor:** Katherine Kaczynski

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**Cell:** 508-574-9485

(Note: When contacting me by email, please state the course name in the subject area.)

## Course Overview

### Course Description:

This course is designed for educators, specialist, or any professional who works in the PreK-6 learning environment. Through *Special Topics*, this course explores the connection between the developing brain, a body in motion and readiness to learn.

### Participation Requirements:

Participants will explore the resources cited in each of the weekly assignments.

Complete all weekly Required Readings/Viewings, prior to the online discussions.

Participants will come prepared for in depth discussions and ready to participate actively in the online discussion board, from the start to the completion of each week.

Completion of a final project is required.

### Course Content:

Participants will learn about the impact that physical activity has on the developing brain, and readiness to actively learn in the classroom.

Week 1:

Module 1 - Physical Activity & Early Brain Development

Week 2:

Module 2: The Brain Body Connection & Executive Functions

Week 3:

Module 3: Brain Play in the Classroom

Week 4:

Module 4: Literacy, Math & Movement

### Student Outcomes

Participants will be able to:

Identify and discuss the Guidelines for Preschool Learning Experiences, as written by the Massachusetts Department of Education.

Examine the impact that physical activity has on early brain development.

Describe and discuss the implementation of movement and executive functioning.  
Examine and discuss the various strategies used to incorporate physical activity into the daily classroom.  
Examine and discuss the connections between movement and literacy and math development.

**Grading Components:**

80 points = the readings (tied to the number, and quality of posts (Rubric for discussion board)  
20 points = Final Project: PowerPoint, Prezi, Podcast, Adobe Spark or Research Paper (APA)  
**100 points**

**Grading/Grade Points**

A, A- (95-100 A, 90-94 A-) Indicates that the level of work is of superior quality and exceeds specific guidelines in one or more ways. Work and discussion posts exceed expectations.  
B+, B, B- (87 - 89 B+, 83 - 86 B, -80 – 82, B-) Indicates that the course work has met the requirements and was judged acceptable. Work and discussion posts meet expectations.  
C+, C, C- (77 – 79 C+, 73-76 C, 70-72 C) indicates that the level of work did not adequately meet the requirements.  
D+ 69-67 D 66-63 D- 62-60 F 59-0

**How to use the Guiding Questions**

Each weekly discussion will be based on the required readings/viewings. Each weekly Discussion Board will begin with one or more questions, referred to as *Guiding Questions* or *GQ*. Discussions boards run week to week, once a week closes, posts cannot be made up. Please see the **Rubric for Asynchronous Discussion Participation**.

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Week 1

Module 1: Physical Activity & Early Brain Development  
Required Readings and Videos

Read pages 32 – 34

Massachusetts Department of Education, Guidelines for Preschool Learning Experiences.

Please pay specific attention to the following:

Guiding Preschool Learning in Health Education. 32 - 2.

Build body awareness, strength, and coordination through locomotion activities. Growth and Development 1.1, 1.2.

Guiding Preschool Learning in the Arts., Guiding Preschool Learning in Health Education., Physical Development, P. 34.

11. Build finger dexterity. Physical Activity and Fitness 2.1 12. Use eye-hand coordination, visual perception and tracking, and visual motor skills in play activities. Physical Activity and Fitness 2.1.

Explore activities and vocabulary related to movement, balance, strength, and flexibility. Movement Elements & Dance Skills 1.1, 1.2., 2. Respond to a variety of musical rhythms through body movement. Movement Elements & Dance. Skills 1.3, Reading and Notation 2.1.

Retrieved from

[http://www.eec.state.ma.us/docs1/curriculum/20030401\\_preschool\\_early\\_learning\\_guidelines.pdf](http://www.eec.state.ma.us/docs1/curriculum/20030401_preschool_early_learning_guidelines.pdf)

Read pages 1 - 4

Bodrova, E. & Leong, D. J. (2003, April). The Importance of Being Playful. Educational Leadership; Vol. 60, Issue 7. Retrieved from [https://framingham.blackboard.com/bbcswebdav/pid-366166-dt-content-rid-1263837\\_1/courses/S18.PRDV.71827C0B/S18.PRDV.71827C0B\\_ImportedContent\\_20171204070032/Th e%20Importance%20of%20Being%20Playful.pdf](https://framingham.blackboard.com/bbcswebdav/pid-366166-dt-content-rid-1263837_1/courses/S18.PRDV.71827C0B/S18.PRDV.71827C0B_ImportedContent_20171204070032/Th e%20Importance%20of%20Being%20Playful.pdf)

Read page 1

Bosworth, L. S. (2010, September 16). Science News from research organizations, Science Daily, Children's brain development is linked to physical fitness, research finds. University of Illinois at Urbana-Champaign. Retrieved from <https://www.sciencedaily.com/releases/2010/09/100915171536.htm>

Read page 1

Elkind, D. (2008, June 9). Cognitive and Emotional Development Through Play. Greater Good Magazine. Retrieved from <http://sharpbrains.com/blog/2008/06/09/cognitive-and-emotional-development-through-play/>

Watch this video

Time: 28:10

Pasek, K. H. (2012, February 4). Importance of Play. University of Illinois, Chicago. Retrieved from <https://www.youtube.com/watch?v=jZbL8669uk>

## Week 2

### Module 2: The Brain Body Connection & Executive Functions

Required Readings, podcasts and videos

Video

Time 0:27

Bunge, S. A. (2015, September 30). Learning Through Play: Developing Children's Executive Function Skills. Center on the Developing Child at Harvard University. Retrieved from <https://www.youtube.com/watch?v=A-ILeKHjR7Y>

Video

Time 5:35

InBrief: Executive Function: Skills for Life and Learning. Center on the Developing Child at Harvard University. (2012, June 18). Retrieved from [https://www.youtube.com/watch?v=efCq\\_vHUMqs](https://www.youtube.com/watch?v=efCq_vHUMqs)

Read page 1

Paul, A. M. (2014, July 10). The Body Learns: For years we've been telling kids to sit still and pay attention. That's all wrong. Slate, New America, and ASU. Retrieved from [http://www.slate.com/articles/technology/future\\_tense/2014/07/educational\\_technology\\_s\\_next\\_move\\_tools\\_to\\_help\\_kids\\_learn\\_with\\_their\\_bodies.html](http://www.slate.com/articles/technology/future_tense/2014/07/educational_technology_s_next_move_tools_to_help_kids_learn_with_their_bodies.html)

Read page 1

(2012). Enhancing and Practicing Executive Function Skills with Children from Infancy to Adolescence. Center on the Developing Child at Harvard University. Retrieved from <http://developingchild.harvard.edu/resources/activities-guide-enhancing-and-practicing-executive-function-skills-with-children-from-infancy-to-adolescence/>

Read page 1

(2012). Executive Function Activities for 3- to 5-year-olds. Center on the Developing Child at Harvard University. Retrieved from <http://developingchild.harvard.edu/wp-content/uploads/2015/05/Executive-Function-Activities-for-3-to-5-year-olds.pdf>

Read page 1

(2012). Executive Function Activities for 5- to 7-year-olds. Center on the Developing Child at Harvard University. Retrieved from <http://developingchild.harvard.edu/wp-content/uploads/2015/05/Executive-Function-Activities-for-5-to-7-year-olds.pdf>

Podcast

Time 18:38

Wilson, D. (2014, March 12). Brain Based Learning: Move Your Body, Grow Your Brain. Edutopia. Retrieved from <http://www.edutopia.org/blog/move-body-grow-brain-donna-wilson>

### **Week 3**

#### **Module 3: Brain Play in the Classroom**

Required Readings, Watching, Listening

Read page 1

Rice, M. (2014, February 18). What is the teacher's role in supporting play in early childhood classrooms? Innovations and Perspectives. Retrieved from <http://www.ttacnews.vcu.edu/2014/02/what-is-the-teachers-role-in-supporting-play-in-early-childhood-classrooms/>

Read pages 1 - 4

Almon, J. & Miller E. (2011, November). The Crisis in Early Education: A Research-Based Case for More Play and Less Pressure. Alliance for Childhood. Retrieved from [http://www.allianceforchildhood.org/sites/allianceforchildhood.org/files/file/crisis\\_in\\_early\\_ed.pdf](http://www.allianceforchildhood.org/sites/allianceforchildhood.org/files/file/crisis_in_early_ed.pdf)

Read pages 1-7

Lockhart, S. (2011). Play: An Important Tool for Cognitive Development. Curriculum Newsletter High Scope. Volume 24, No. 3. Retrieved from [http://www.commercechildrenscenter.com/pdf/files/pdfs\\_only/Play\\_A\\_Tool\\_for\\_Cognitive\\_Development.pdf](http://www.commercechildrenscenter.com/pdf/files/pdfs_only/Play_A_Tool_for_Cognitive_Development.pdf)

Read page 1

Dewar, G. (2014, February). The Cognitive Benefits of Play: Effects on the learning brain. Retrieved from <http://www.parentingscience.com/benefits-of-play.html>

Read page 1

Hansen, C., Lyding, L. & Zambo, D. (2014, October). Instruction That Sticks: Move It or Lose it! ASCD. Volume 72., No 2. Retrieved from <http://www.ascd.org/publications/educational-leadership/oct14/vol72/num02/Move-It-or-Lose-it!.aspx>

Read

Movement in the Classroom – Dr. Martha Eddy, CMA, RSMT. Rationales, Guidelines, and Resources To Get Schools Moving. Retrieved from <http://www.wellnesscke.net/downloadables/Rationales,Strategies&ResourcesforMovementintheClassroom.pdf>

#### **Week 4**

#### **Module 4: Literacy, Math & Movement**

Required Readings, and videos

Video

Time 10:43

Ratey, J. J. (2012, November 18). Run, Jump, Learn! How Exercise Can Transform our Schools. Retrieved from <https://www.youtube.com/watch?v=hBSVZdTQmDs>

Read page 1

Griss, S. (2013, March 20). The Power of Movement in Teaching and Learning. Education Week Teacher. Retrieved from [http://www.edweek.org/tm/articles/2013/03/19/fp\\_griss.html?print=1](http://www.edweek.org/tm/articles/2013/03/19/fp_griss.html?print=1)

Read pages 1-2

Pica, R. (2010, November). Linking Literacy and Movement. Young Children. Retrieved from <https://www.naeyc.org/files/yc/file/201011/Leaps&BoundsOnline1110.pdf>

Video

Time 3:32

Susan Wagner Cook and Susan Goldin-Meadow. (2006). The Role of Gesture in Learning: Do Children Use Their Hands to Change Their Minds? School of Mathematical Sciences, University of Northern Colorado. Journal of Cognition and Development. 7(2), 211–232. Retrieved from <https://pdfs.semanticscholar.org/f5af/862bfabeb4fbafffc29d8d202bce0272086f.pdf>

Read page 1

Poon, L. (2013, April 7). Hand Gestures May Boost Students' Math Learning. National Geographic News. Retrieved from <http://news.nationalgeographic.com/news/hand-gestures-may-boost-students--math-learning/>

Read page 1

Ingmire, J. (2014, March 10). Gesturing with hands is a powerful tool for children's math learning. U Chicago News. Retrieved from

<https://news.uchicago.edu/article/2014/03/10/gesturing-hands-powerful-tool-children-s-math-learning>

Read pages 74 – 79

(2006, May) Active Start—Physical Activity Guidelines for Children Birth to Five Years Education. NAEYC. Beyond the Journal. Retrieved from

<http://journal.naeyc.org/btj/200605/NASPEGuidelinesBTJ.pdf>

## **Discussion Board Rubric for Asynchronous Discussion Participation**

### **A Quality of Postings Indicator**

Asynchronous discussion enhances learning as participants share their ideas, perspectives, and experiences with the class. Participants develop and refine their thoughts through the writing process, plus broaden their classmates' understanding of the course content. Each weekly discussion is organized around the Guiding Questions, which participants must respond to.

Post your thoughts and provide supporting evidence using the readings, viewings, and audios (RVA). DO NOT just give the facts. Posts MUST reflect how the RVAs have impacted upon your thinking and the work that you do.

Participants will use the following feedback to improve the quality of their discussion contributions.

### **Grading Discussion Board Posts**

Discussion postings that meet all criteria for a grade level will receive the highest points possible at that level. Postings that meet mixed levels of criteria will receive a score within the point range of the appropriate levels.

Participation in discussion activities can only be measured by the date on the discussion posting. For example, participating 3 times during the week is measured by postings on 3 different days; there may actually be 5-6 postings, but participation only occurred 3 times during the week.

### **Discussion Board Rubric**

There are five criteria, the Initial Post, Additional Posts, Details in Each Post, The Quality of Information in Response to Other's Posts, and The Frequency of Weekly Discussion Posts. The highest amount of points that can be earned in one week, for a score of excellent, is a score of 20 points.

### **First Criteria**

First criteria, the Initial Post, responds to the Guiding Question or GQ. This is your response to the question following the completion of readings. The initial post fully addresses the Guiding Question or questions. The post demonstrates a proficient understanding, and the score would be 4 points.

An Initial Post that addresses the topic Guiding Question or GQ and shows above average understanding scores 3 points.

An Initial Post that addresses the topic Guiding Question or GQ and shows adequate understanding receives an adequate score of 2 points.

An Initial Post that addresses the topic Guiding Question or GQ and shows Posts not tied to the topic, or no post at all and is found unacceptable and scores 1 to 0 points.

### **Second Criteria**

Second criteria, additional posts, addresses the need for posts following the Initial Post. Additional posts occur throughout the weekly discussions: Additional postings focus on your response to other's while you are reading, and or following the completion of weekly readings or videos. The additional posts build on other's posts and comment analytically. The additional posts quote directly from other's posts, and the score would be 4 points.

Additional posts, which follows the Initial Post, builds on others posts and comments analytically, yet does not directly quote from other's post, scores 3 points.

Additional posts, which follows the Initial Post, respond to others posts, yet lacks depth and without quoting directly or indirectly from other's post, scores 2 points.

Additional posts, which follows the Initial Post, yet lacks depth and without quoting directly or indirectly from other's post, and comments may not relevant to the discussion, and is found unacceptable and scores 1 to 0 points.

### **Third Criteria**

Third criteria focus on details in each post and addresses the requirement for highly detailed and correct posts. Posts throughout the week would possess three or more quotes from readings, podcasts or videos to support your statements and the score would be 4 points.

Posts throughout the week are detailed and correct. Quotes taken from readings or videos are utilized to support statement at least one to two times and scores 3 points.

Posts throughout the week are somewhat detailed and correct. Quote are not utilized from readings or videos to support statements yet refers to readings and scores 2 points.

Posts throughout the week respond to others with few details or facts. No quotes or references from readings or videos are used to support statements and is found unacceptable and scores 1 to 0 points.

### **Fourth Criteria**

Fourth criteria refer to the quality of information in response to others posts. The posts are responsible for referring to what others have written and provides details from information gathered within the course and encouraged new ideas, and the score would be 4 points.

Posts refer to what others have written, provides some details from information gathered within the course and scores 3 points.

Posts refer only to what others have written, does not provide information gathered within the course and scores 2 points.

Posts do not refer to what others have posted and are found unacceptable and score 1 to 0 points.

### **Fifth criteria**

Fifth criteria refer to the frequency of weekly discussion posts. To have a dynamic class, each participant is encouraged to share their voice, opinions, and reactions to the content and how the new content has impacted upon their thinking and classroom practices. Posts are essential and are equal to class participation. Being present often ensures that your voice is heard.

Posting at least 7-8 times throughout the week is essential, and the score would be 4 points.

Posts at least 5-7 times throughout the week and shows good effort, scores 3 points.

Posts at least 3-4 times throughout the week and shows acceptable effort, scores 2 points.

Posts 0-2 times and shows unacceptable effort, scores 1 to 0 points.

Note: All Discussion Board rubric points are evaluated on a 4-3-2-1-0 basis. The highest score for each Discussion (4) would be 20 points or a total of 80 points.

Participants will review readings/viewings, by analyzing the content for information, what is interesting, and what is new, and what is considered the pros and cons of the information. Participants should justify their analysis, providing their own opinions, not just quote information. However, your opinion must be backed up by quoting from the readings/viewings.

What to Consider when posting:

- Guiding Questions (GQ)
- Initial posting
- Refer to at least two specific points, from the article or reading.
- Conveying new information
- Contrasting earlier information learned in the course of new information (after week1).
- Convey information from the read, watch, listen information gathering, to personal experiences.
- Consider the importance of the final post to the Discussion board
- Discussion at a \*critical level is not just facts from information gathering, but rather provides supporting evidence (see below).
- Discussion at a critical level means discussing, for example, the following:
  - Opinion of the facts gathered or facts mentioned by others in the discussion group
  - Why the opinion is held



- What is wrong with the fact/s mentioned
- Are the points, facts, opinions, consistent and or inconsistent with the material presented so far
- What are the implications for the future, consistencies, and or inconsistencies within the readings or videos?

Note: Participants will review readings/viewings, by analyzing the content for information, what is interesting, and what is new, and what is considered the pros and cons of the information. Participants should justify their analysis, providing their own opinions, not just quote information. However, your opinion must be backed up by quoting from the readings/viewings.

### **Final Project – Due on or before the last day of class**

Participants are required to create a Final Project. The Final Project should address how the course content has influenced their thinking. The Final Project can be a tool to be used by you for professional purposes, a presentation or an activity. It should be short, for example, no more than 20 slides, concise, and cite from course content. DO NOT provide an overview of the course content.

\*Format choices:

- 1.PowerPoint (Visual & Audio) might be useful if the intent is to share the information.
- 2.A Prezi (instead of a PowerPoint)
- 3.A Podcast may be useful to create a report, much like a newscast \*\*
- 4.Writing a 10-page double-spaced APA style paper. One page of the paper may include a Wordle.
- 5.Or any other application that you choose to create your Final Project.

\*\*Note: If a participant chooses to create a Podcast, a summary of the podcast and sources cited, using APA style guidelines is required.

### **Rubric for the Final Project**

Five criteria for the final project are as follows: Question, Information, Quotes and Encourages new ideas.

#### **First criteria, the question**

If the question directly relates to the course topics and the work that you do, this question earns a score of 4 points.

If the question is somewhat related to the course topics, and the work that you do, this question earns a score of 3 points.

If the question indirectly relates to the course topics, and the work that you do, this question earns a score of 2 points.

If the question does not directly relate to the course topics, and or the work that you do, this question earns a score of 1 to 0 points.

#### **Second criteria, the information**

If the information is highly detailed and correct, you earn a score of 4 points.

If the information is somewhat detailed and correct, you earn a score of 3 points.

If the information has some detail and somewhat correct you earn a score of 2 points.

If the information lacks detail, and or is not correct, you earn a score of 1 to 0 points.

**Third criteria, how analytical is it**

If the information is analytical and demonstrates a proficient understanding, you earn a score of 4 points.

If the Information is analytical and demonstrates above average understanding, you earn a score of 3 points.

If the Information is analytical and demonstrates an acceptable level of understanding, you earn a score of 2 points.

If the Information is not analytical and or demonstrates a poor understanding, you earn a score of 1 to 0 points.

**Fourth criteria, using quotes**

If 4 quotes or more are used to support statements/assertions you earn a score of 4 points.

If 3 quotes or more are used to support statements/assertions you earn a score of 3 points.

If 2 quotes or more are used to support statements/assertions you earn a score of 2 points.

If quotes are not used, or 1 quotes are used to support statements/assertions you earn a score of 1-0 points.

**Fifth criteria, encouraging new ideas or new thinking**

If the final project responds to the final project question and responds to misconception, new ideas or new thinking you earn a score of 4 points.

If the final project responds to the final project question and responds somewhat to misconception, new ideas or new thinking you earn a score of 3 points.

If the final project responds the final project question and responds to misconception yet does little to encourage new ideas or new thinking you earn a score of 2 points.

If the final project does or does not respond to the final project question, and does or does not responds to misconception, or new ideas or new thinking you earn a score of 1 to 0 points.

**Final Project – Due on or before the last day of class**

Participants are required to create a Final Project. The Final Project should address how the course content has influenced their thinking. The Final Project can be a tool to be used by you for professional purposes, a presentation or an activity. It should be short, for example, no more than 20 slides, concise, and cite from course content. **DO NOT provide an overview of the course content.**

**\*Format choices:**

PowerPoint (Visual & Audio) might be useful if the intent is to share the information.

A Prezi (instead of a PowerPoint)

A Podcast may be useful to create a report, much like a newscast. If a participant chooses to create a Podcast, a summary of the podcast and sources cited, using APA style guidelines is required.

Writing a 10-page double-spaced APA style paper. One page of the paper may include a Wordle.

Or any other application that you choose to create your Final Project.

### **College Policy Regarding Academic Honesty**

Integrity is essential to academic life. Consequently, students who enroll at Framingham State College agree to maintain high standards of academic honesty and scholarly practice. They shall be responsible for familiarizing themselves with the published policies and procedures regarding academic honesty. Refer to *FSU Graduate Catalog, Student Conduct section, page 7* at: <http://www.framingham.edu/graduate-and-continuing-education/documents/grad-catalog-0910.pdf>.

### **Research**

Additional supporting information can be researched at the Framingham State University Online Library. Just logon to you FSU My Campus account and go to the tab that says Library.

### **Academic Accommodations Policy**

Framingham State University offers equal opportunities to all qualified students, including those with disabilities and impairments. The University is committed to making reasonable accommodations as are necessary to ensure that its programs and activities do not discriminate, or have the effect of discriminating, on the basis of disability. Academic Support serves students with learning and psychiatric disabilities as well as students with visual, mobility and hearing impairments. For further information about this, please visit the website at: <https://www.framingham.edu/academics/center-for-academic-success-and-advising>

or contact Ms. LaDonna Bridges, Director of Academic Support/Disability Services, in the Center for Academic Support and Advising (CASA) at 508-626-4906 or [lbridges@framingham.edu](mailto:lbridges@framingham.edu)

### **Copyright**

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**Note: Syllabus is subject to change with notice. Check Blackboard regularly for updates.**