

Peggy Taylor, MSSE
Director

Holly Thompson,
MOOCTA

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Support

John Graves,
MOOC
Instructor



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Current Students

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Intercollege Programs for Science Education

Montana State University
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Location: 401 Linfield Hall

Director:
Dr. Peggy Taylor

Master of Science in Science Education Program

Offering Innovative Online and Campus-based Graduate Courses for Science Educators

Welcome to the Department of Intercollege Programs for Science Education website! We offer unique online and campus courses in biology, chemistry, earth science, ecology, education, engineering, environmental science, land resources, microbiology, physics, and plant sciences designed for science educators. Courses may be taken for professional development or to earn a graduate degree.

SUMMER COURSE PHOTOS

Dinosaur Paleontology



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MSSE
Advising Center

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Summer 2013
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MSSE
News Items

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C
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COMMUNITY
AND CONNECTIONS

What is massive?
• 100?
• 1,000?
• 10,000?
• 100,000?

M
MASSIVE

Open registration?

O
OPEN

Local cohorts?

O
ONLINE

Self-paced?

C
COURSE

Start/end dates?

College credits?

Badges?

Role of the instructor?

Learning community?

Open content?

Free of charge?

Affordable?

Real-time interaction?

Scripted assessments and feedback?

Email Login

.....



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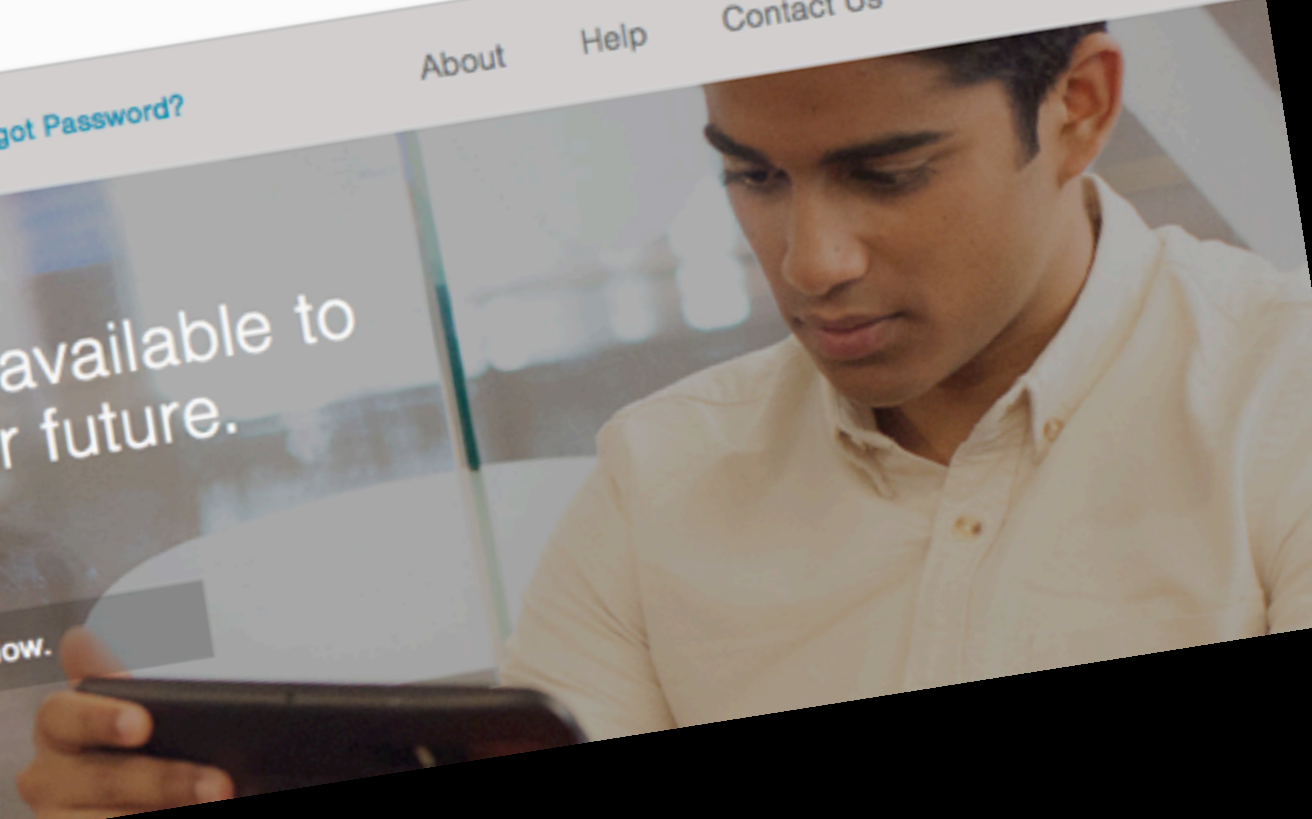
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Please note your password is case sensitive.

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OPEN COURSES

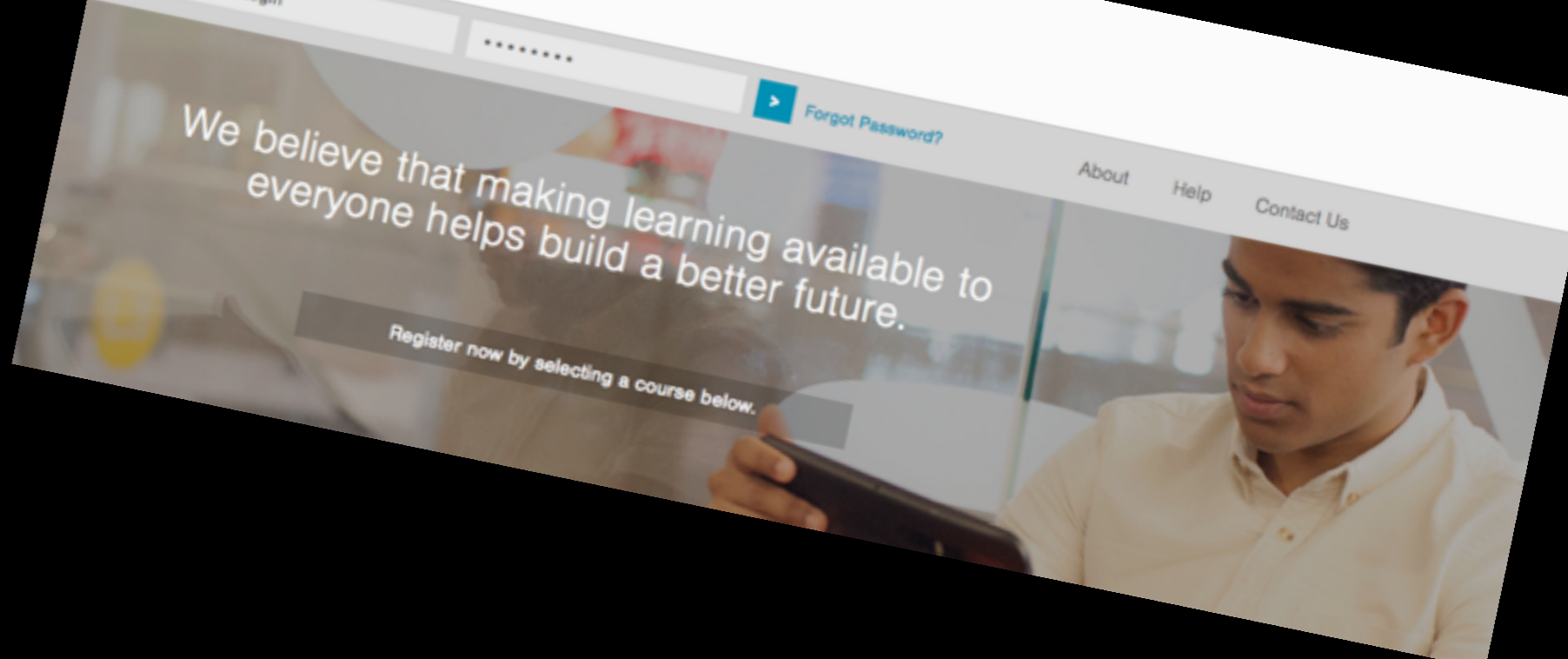
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We believe that making learning available to everyone helps build a better future.

Register now by selecting a course below.





MSSE Listserve



Pilot Study

- ...limited enrollment to 200
- ...TA support
- ...technical support
- ...limited instructor contact
- ...two completion levels



CERTIFICATE OF
Blue Level
COMPLETION

MSSE MOOC
Inquiry Through Science &
Engineering Practices



Kevin Bowman
PARTICIPANT

John Graves, EdD
INSTRUCTOR

Fall 2013

CERTIFICATE OF
GOLD LEVEL
ACHEIVEMENT

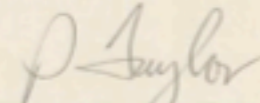
MSSE MOOC
Inquiry Through Science &
Engineering Practices

Grade Earned: A



Marie Hamaker
STUDENT

John Graves, EdD
INSTRUCTOR


Peggy Taylor, EdD
MSSE PROGRAM DIRECTOR

Fall 2013



197 Registered



84 Began Week 1

Week 9 Discussion ▾

© Available after Monday, November 18, 2013 6:29 PM MST.

▾ Hide Topics for Week 9 Discussion

Week 1: 84 (100%)
Week 2: 62 (74%)
Week 3: 51 (62%)
Week 4: 43 (51%)
Week 5: 38 (45%)
Week 6: 36 (43%)
Week 7: 30 (35%)
Week 8: 31 (37%)
Week 9: 30 (35%)
Week 10: 30 (35%)
Week 11: 29 (33%)

Discussion Self Assessment

Did I respond at least once to the questions/issues raised by my Discussion Group leader? (5)

Did I post at least two meaningful and constructive responses to other participants' messages? Please provide a **one sentence** overview of postings you made. (5)?

Did I make a connection between the readings and my classroom/school? Please provide **one sentence** describing the connection you made. (5)

Did I make connections with my new learning and the Science & Engineering Practices as they relate to the inquiry strategies I am learning? Please provide **one sentence** describing the connections you made. (5)

Did I login in early in the week, by Wednesday, to participate in discussion? (5)

Provide a 2-3 sentence summary of the progress of your Inquiry Investigation beginning Week 3 and beyond. (25)

Do you have any Muddiest Point questions or anything else you'd like to ask the instructor?

Proposed discussion score for this week: _____ (out of 50 pts)

From: "MOOC Mania" NEA
Higher Education Journal Thought
& Action, Vol. 29, Fall 2013, p. 7-26



- Talking Head
- Sage on Stage

- Short podcasts
- Weekly assignments





Little or no required reading

- Readings online
- Readings from the suggested text





No professor interaction

- Personal discussion prompt reply weekly
- Others as asked





Assessed by peers

Final Portfolio
assessed by me



SCIENCE



No written assignments

Written assignments
in the Portfolio



SCIENCE



MOOCs are pushed for those desperate for a chance at college

Targeting a specific group of learners





Lack of human touch

Making the human touch



SCIENCE



Completion rate 5-9%

- Defined as Serious Enrollees



SCIENCE

Week 9 Discussion ▾

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▾ Hide Topics for Week 9 Discussion

Table 2

Number and Percentage of Submitted Discussion Rubrics per Week

Week	# of Submitted Discussion Rubric	% Completion
1	56	-
2	54*	100
3	47	87
4	42	78
5	36	67
6	33	61
7	32	59
8	31	57
9	31	57
10	31	57
11	30	56

Note. The number of *serious enrollees* was set at participants who submitted at least 2 discussion rubrics.



Completion rate 5-9%

- Course completion rate 56%
- Gold Level completion rate 16%
- Blue completion rate 40%





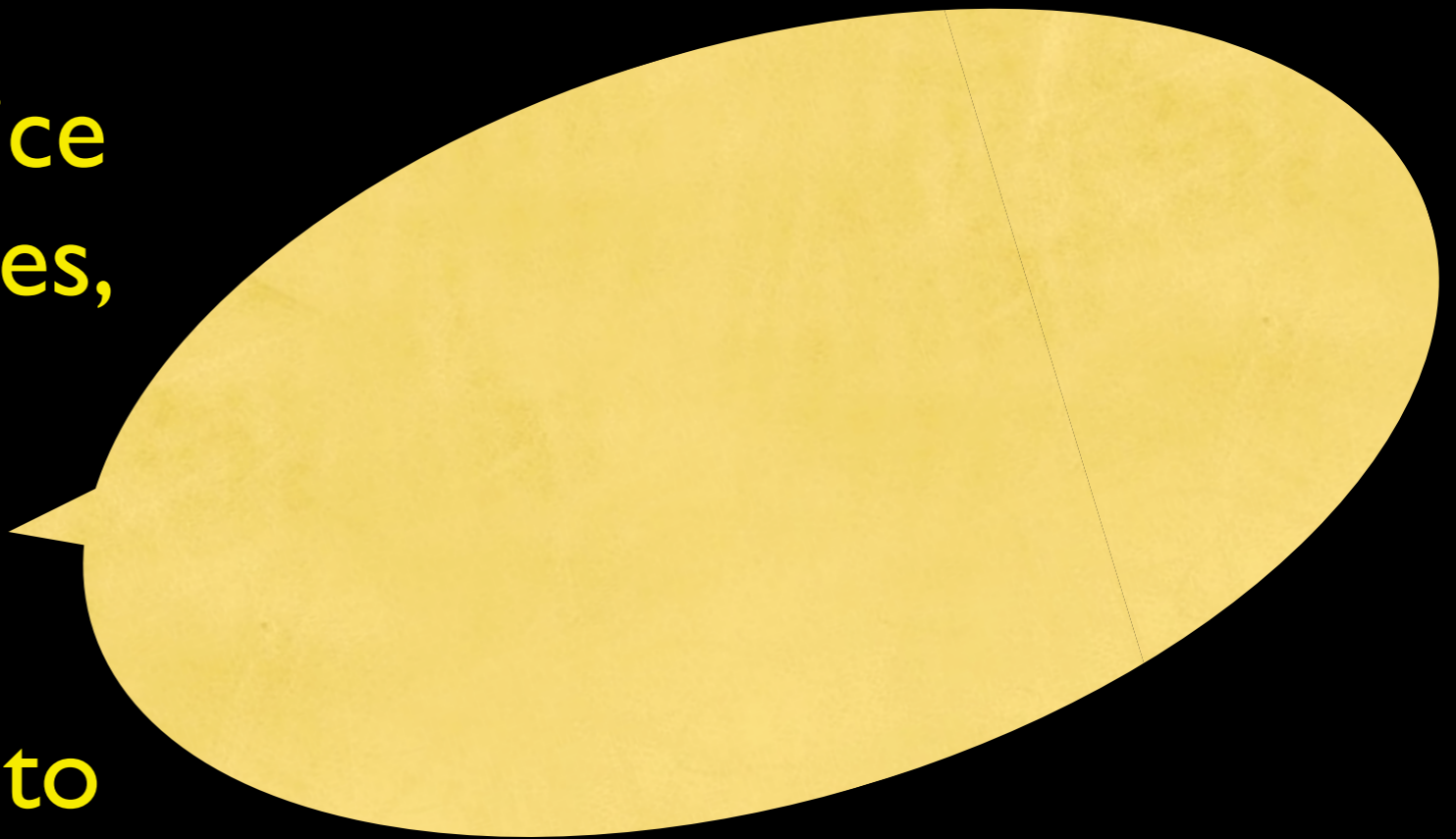
- Professional Development
- Met Participant Expectations
- Recruiting Tool for MSSE

I hoped to learn or practice different teaching strategies, which I did.

I learned a lot about science inquiry and hope to learn more.

I think this MOOC would be really good for some new teachers to get some ideas.

I think other science educators would benefit from the materials...





Inquiry Through Science & Engineering Practices



**CERTIFICATE OF
GOLD LEVEL
ACHEIVEMENT**

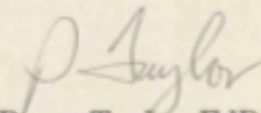
MSSE MOOC
Inquiry Through Science &
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Grade Earned: A



Marie Hamaker
STUDENT

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INSTRUCTOR


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MSSE PROGRAM DIRECTOR

Fall 2013

jgravesedu.com

INQUIRY THROUGH



SCIENCE & ENGINEERING PRACTICES

MOOC

John Graves, EdD
Intercollege Programs for Science Education
Montana State University
Fall 2013 Semester



jgravesedu.com



Image Resources

- http://www.google.com/imgres?imgurl=&imgrefurl=http%3A%2F%2Fen.wikipedia.org%2Fwiki%2FMassive_open_online_course&h=0&w=0&tbnid=VW2WeqQg0i60GM&zoom=1&tbnh=176&tbnw=286&docid=UplfWcyL9Fc0HM&tbm=isch&ei=apsxU6bPH4X6oAS5hoGACA&ved=0CAUQsCUoAQ
- <https://opencourses.desire2learn.com/cat/?sessionExpired=1&target=%2fd21%2fle%2fcontent%2f6654%2fHome>
- <http://btc.montana.edu/courses/asp/ntenhome.aspx>
- https://www.google.com/search?q=facebook&client=firefox-a&hs=9Np&rls=org.mozilla:en-US:official&channel=sb&source=lnms&tbm=isch&sa=X&ei=BZ0xU6PmFdLmoASliYGIBg&ved=0CAoQ_AUoAw&biw=1440&bih=787#facrc=_&imgdii=_&imgsrc=Oi0dU87Q224zwM%253A%3B3IxDzfbEdOXWM%3Bhttp%253A%252F%252Flikesreviewer.com%252Fwp-content%252Fuploads%252F2013%252F06%252Fis320.jpg%3Bhttp%253A%252F%252Flikesreviewer.com%252F%3B2197%3B1463
- https://www.google.com/search?q=goals&client=firefox-a&hs=mep&rls=org.mozilla:en-US:official&channel=sb&source=lnms&tbm=isch&sa=X&ei=C6ExU5ayE83ooATCt4GQCA&ved=0CAgQ_AUoAQ&biw=1440&bih=787#facrc=_&imgdii=_&imgsrc=-l2rEf10_PIRwM%253A%3BgC9LQGonLriO8M%3Bhttp%253A%252F%252Fwww.headachecare.com%252Fimages%252Fgoals.jpg%3Bhttp%253A%252F%252Fwww.headachecare.com%252Fgoals.html%3B400%3B300