Holly Thompson, MOOC TA

John Graves, MOOC Instructor





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Intercollege Programs for Science Education

Montana State University P.O. Box 172805 Bozeman, MT 59717-2805

Tel: (406) 994-5679 Fax: (406) 994-5575 E-mail: <u>msse@montana.edu</u> 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.

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Information

Tools

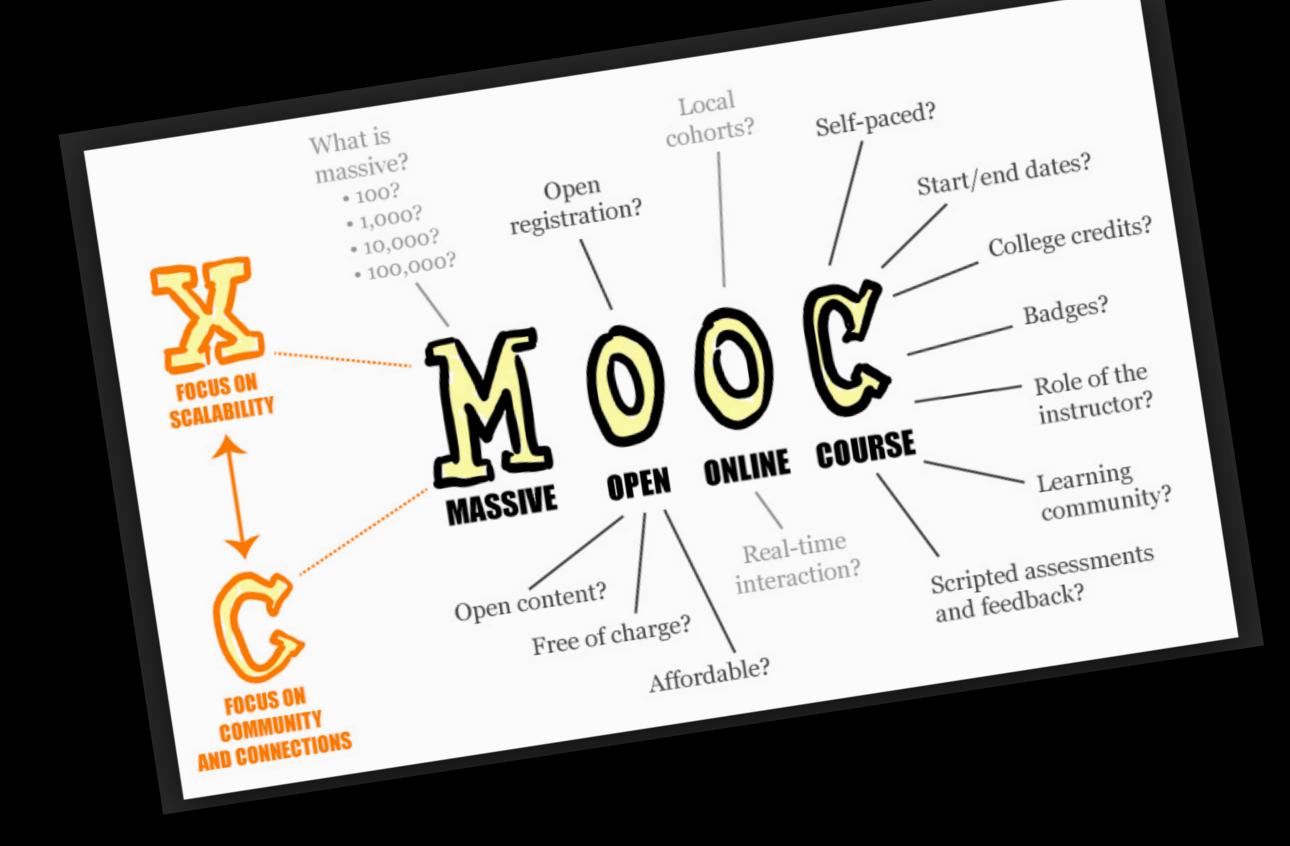
Tuition & fees

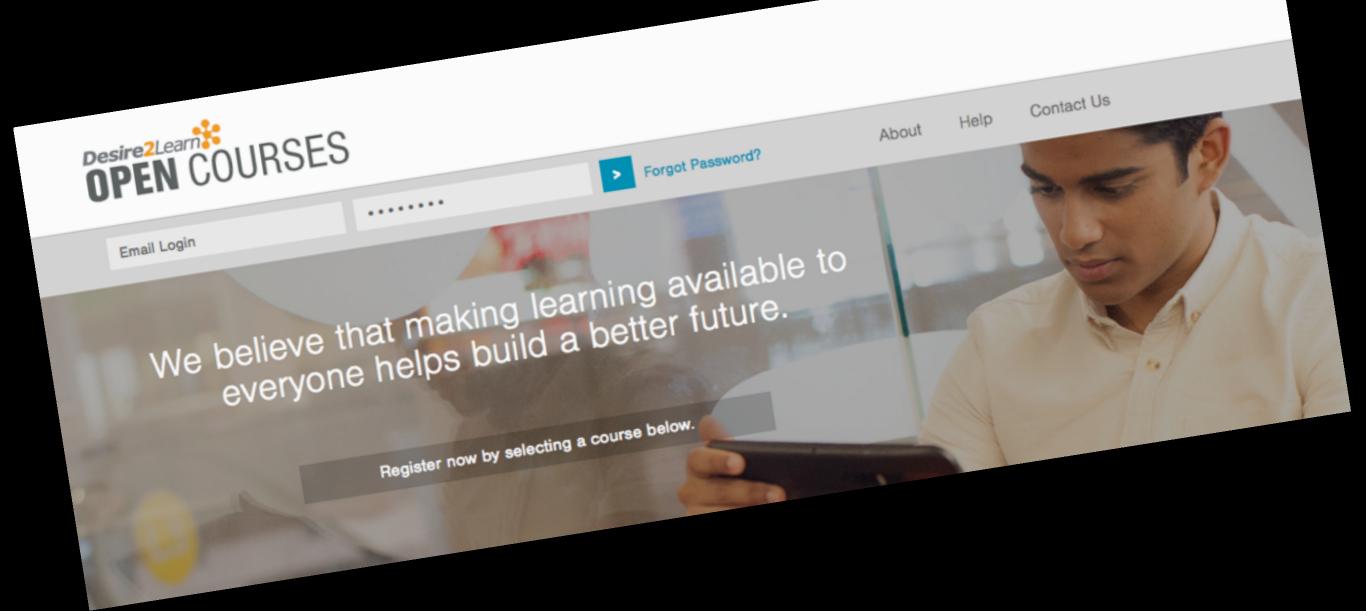
- MSSE Director's Letter
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MSSE Student Quotes MSSE News Items

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MSSE Listserve





Pilot Study 2013 ...limited enrollment to 200TA support ...technical support ...limited instructor contact ...two completion levels





CERTIFICATE OF GOLD LEVEL ACHEIVEMENT

MSSE MOOC

Inquiry Through Science & Engineering Practices

Grade Earned: A

Marie Hamaker

John Graves, EdD

Peggy Taylor, EdD

Fall 2013



Year I 197 Registered

84 Began Week I



Week I: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 [0:30 (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 Did I make a connection between the readings and my classroom/school? Please provide one sentence describing the Did I make connections with my new learning and the Science & Engineering Practices as they relate to the inquiry strategies I am learning? Places provide one contents describing the connections were made. (5) 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

Readings online
Readings from the suggested text



Little or no required reading



 Personal discussion prompt reply weekly SCIENCE

Others as asked

Final Portfolio assessed by me

Assessed by peers

SCIENCE



Written assignments in the Portfolio SCIENCE

Targeting a specific group of learners

MOOCs are pushed for those desperate for a chance at college



Making the human touch

SCIENCE



Defined as Serious Enrollees

SCIENCE

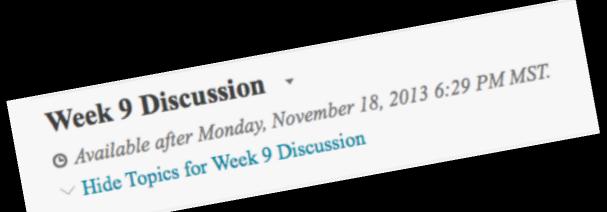


Table 2

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%

2014: 15 Blue 10 Gold 6 used in MSSE Program



2015: Brightspaces Free Offering
 37 enrolled
 8 serious enrollees

- Professional Development
- Met Participant Expectations

GOAL

• 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

MONTANA STATE UNIVERSITY

CERTIFICATE OF GOLD LEVEL ACHEIVEMENT

MSSE MOOC

Inquiry Through Science & Engineering Practices

Grade Earned: A

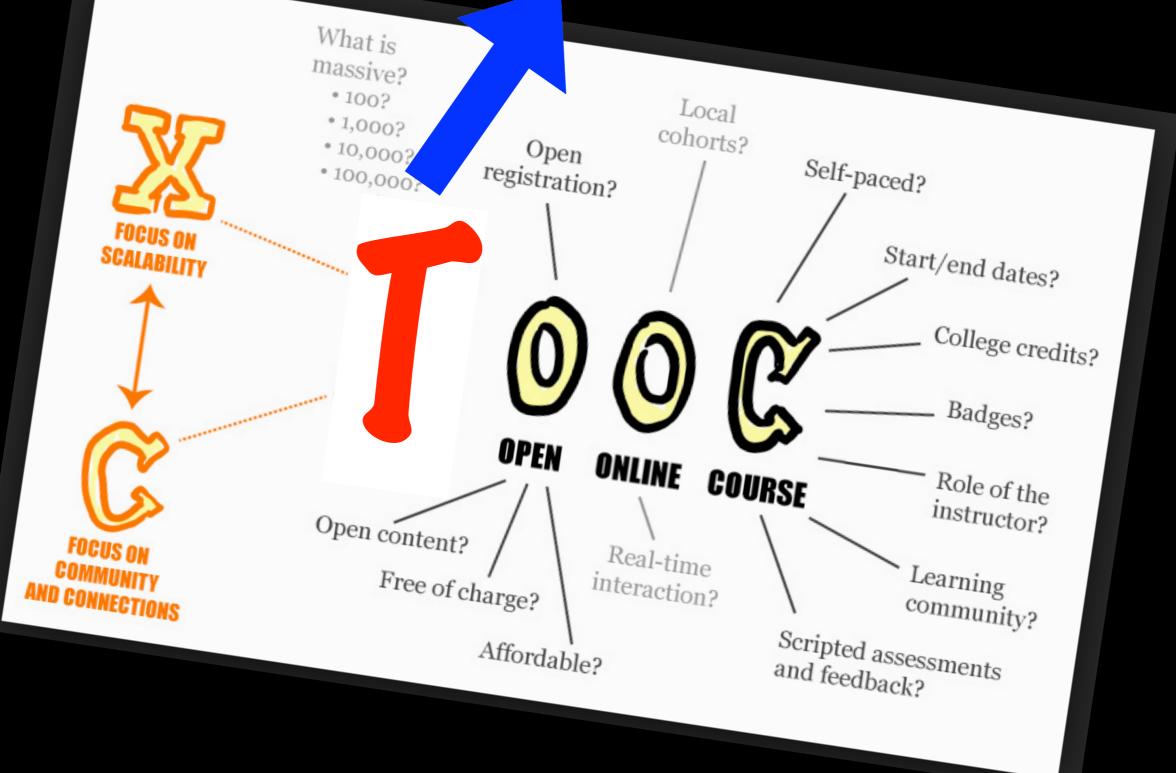
Marie Hamaker

John Graves, EdD

Peggy Taylor, EdD

Fall 2013

Targeted



jgravesedu.com

INQUIRY THROUGH



SCIENCE & ENGINEERING PRACTICES

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



jgravesedu.com

Follow presentations link





Image Resources

<u>http://www.google.com/imgres?imgurl=&imgrefurl=http%3A%2F%2Fen.wikipedia.org%2Fwiki</u>
 <u>%2FMassive_open_online_course&h=0&w=0&tbnid=VW2WeqQg0i60GM&zoom=1&tbnh=176&tbnw=286&docid=</u>
 <u>UplfWcyL9Fc0HM&tbm=isch&ei=apsxU6bPH4X6oAS5hoGACA&ved=0CAUQsCUoAQ</u>

• <u>https://opencourses.desire2learn.com/cat/?sessionExpired=1&target=%2fd2l%2fle%2fcontent%2f6654%2fHome</u>

<u>http://btc.montana.edu/courses/aspx/ntenhome.aspx</u>

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=BZ0xU6PmFdLmoAS1iYGlBg&ved=0CAoQ_AUoAw&bi w=1440&bih=787#facrc=_&imgdii=_&imgrc=Oi0dU87Q224zwM%253A%3B31xvDzfbEdOXWM%3Bhttp%253A %252F%252Flikesreviewer.com%252Fwp-content%252Fuploads%252F2013%252F06%252Fis320.jpg%3Bhttp%253A %252F%252Flikesreviewer.com%252F%3B2197%3B1463

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%252Fwww.headachecare.com%252Fgoals.html%3B400%3B300