

Analyzing Learning in a Massive Open Online Course for Teachers Project Proposal

Abstract

In Fall 2014, Oregon State University launched its first Massive Open Online Course (MOOC), [Supporting English Language Learners Under New Standards](#). Funded by the Oregon Department of Education and created in partnership with Stanford University, this course was designed to provide K-12 teachers with specific professional development and enrolled over 5000 educators. Using pre- and post-course surveys, assignment submissions with peer evaluations, discussion board posts, and interviews with participants from this MOOC, as well as later iterations of the same MOOC, we will answer two research questions. First, what did participants learn as a result of MOOC participation and how did this impact their work as teachers? Second, what structural supports provided by schools and/or districts, including what aspects of blended learning environments, facilitated participants' learning within the MOOC? To realize the potential of MOOCs such as this one, it is crucial that we better understand what supports meaningful learning among MOOC participants. The research project outlined here will serve as an important step towards answering these questions, helping OSU understand whether and how to support MOOCs in the future and also moving the broader field of online learning forward in improving MOOC design and implementation.

Objectives

Massive Open Online Courses (MOOCs) have generated considerable excitement and considerable skepticism since their recent inception (e.g., Kim, 2014; Perna et al., 2014). In Fall 2014, Oregon State University launched its first Massive Open Online Course (MOOC), [Supporting English Language Learners Under New Standards](#). Funded by the Oregon Department of Education and created in partnership with Stanford University, this course was designed to provide K-12 teachers with specific professional development. This MOOC attracted considerable interest, with 5780 educators enrolling from Oregon and beyond. Unlike more conventional MOOCs in which learning is independent with few opportunities for collaboration among participants (Daniel, 2012; Milligan, Littlejohn, & Margaryan, 2013), in this MOOC, participants worked within collaborative teams and sometimes within blended learning environments, such as in-person meetings with other colleagues also participating in the MOOC. Some school districts also provided a variety of other institutional supports for MOOC participants, such as stipends and protected time to engage in course-related activities.

We will analyze the rich dataset gathered from this MOOC—including pre- and post-course surveys, assignment submissions, peer evaluations, discussion board posts, and activity within collaborative team spaces—plus also gather new data through interviews with course participants, to address two research questions:

- Research Question 1: What did participants learn as a result of MOOC participation and how did this impact their work as teachers?
- Research Question 2: What structural supports provided by schools and/or districts, including what aspects of blended learning environments, facilitated participants' learning within the MOOC?

The second iteration of this MOOC is currently being offered during Fall 2015, and a third iteration for Fall 2016 is currently in the planning stages. Findings from our research will directly inform the design of the MOOC for Fall 2016. In addition, our findings will inform the field about how MOOCs can best serve as tools to support teacher professional development and learning more generally. Finally, our findings will contribute to conversations at OSU about whether and how MOOCs might contribute towards the University's goals of strengthening impact and reach within Oregon and beyond and providing a transformative educational experience for all learners.

Intervention

Researchers in the emerging MOOC space have distinguished two types of MOOCs. The first, referred to as xMOOCs, consist of conventional university courses made freely available to large numbers of participants. Participants typically work independently, watching online lectures and completing assignments such as quizzes in order to demonstrate mastery of material. One academic described these MOOCs as "digital textbooks" (Parr, 2013). The other category of MOOC, referred to as cMOOCs, focus on the construction of new knowledge. More recent interpretations of the cMOOC category also focus on the collaborative and connective nature of these courses (e.g., Milligan et al., 2013). OSU's first MOOC falls in the cMOOC category, with participants working in teams to learn from one another. Specifically, the course requires participants to engage in several cycles of data collection and analysis by: 1) collecting and transcribing language samples of their students¹ engaging in argumentation in different content areas (e.g., science, language arts), a key practice under new standards; 2) analyzing these language samples using a rubric created in consultation with national experts; 3) reviewing the student language samples collected by other MOOC participants and providing peer feedback; 4) designing lesson plans based on what participants learned about their students' argumentation skills; and 5) repeating the cycle of data collection, analysis, peer feedback, and teaching in response to insights.

The course has four learning outcomes for participants:

1. Develop a practical understanding of argumentation, with emphasis on what this looks like in linguistically diverse classrooms that are focused on teaching to new standards.
2. Listen more carefully to student argumentation and use a tool to analyze student argumentation, focusing on how students build disciplinary knowledge and language.
3. Learn and practice practical teaching strategies for building students' abilities to engage in argumentation.
4. Collaborate with other educators and build professional relationships that result in an online community focused on improving students' abilities to engage in argumentation across disciplines and grade levels.

The course's four sessions, all of which involve the collaboration and construction of new knowledge, each include readings, videos, and assignments aligned to these key learning

¹ We use *student* to refer to K-12 students and *participant* to refer to individuals enrolled in the MOOC, who were the teachers of these K-12 students. See Appendix A for an example of an assignment submission from a MOOC participant, including a student

outcomes. Videos of students in K-12 classrooms engaged in argumentation, filmed locally in Oregon by Ecampus staff and edited in collaboration with Dr. Thompson, are a key component of the learning materials for each session.

Outcomes and Evaluation

To address our research questions, we will analyze data related to a variety of outcomes with the goal of contributing to knowledge about whether and under what conditions MOOCs can facilitate meaningful learning. MOOCs are often criticized for their low completion rates, and research on MOOCs has struggled to move beyond completion rates to analyze actual learning among MOOC participants (Perna et al., 2014; Reich, 2015). Our research furthers knowledge in the field of online learning by examining: 1) how course participants demonstrate learning within the course and beyond (Research Question 1); and 2) whether and how particular structural supports, including blended learning environments, facilitate MOOC participants' learning (Research Question 2).

Research Question 1: Analyzing learning among course participants. Much research on MOOCs simply uses completion rates as the metric for evaluating the effectiveness of the course rather than analyzing learning among participants (Reich, 2015; Ho et al., 2014). During the MOOC, we collect a variety of data that enable us to examine what participants learn from the course, including pre- and post-course surveys (n=2,341 and 505 for the Fall 2014 MOOC, respectively) and participant assignments with peer evaluations (n=1,693 for the Fall 2014 MOOC). First, in both the pre- and post-course survey, we provide participants with a language sample of student argumentation.² We then have participants assess that language sample on a variety of dimensions, including the dimensions that are part of the argumentation rubric used in the course. In addition, we provide participants with a list of possible next steps they might take as the teacher of the student featured in the language sample and ask participants to rank the actions in order of priority. By comparing MOOC participants' responses to these questions before and after the course, we are able to learn how their ability to analyze and assess student argumentation, as well as their ability to choose appropriate actions to take as teachers has changed during the course. We also ask several closed and open-ended questions in the pre- and post-course survey on a variety of topics related to the impact of the course on their work as teachers, including how knowledgeable participants feel about particular aspects of new standards, how prepared they feel to implement strategies learned in the course, and in what ways their instructional practices have already shifted. In addition, for each assignment that participants submit, several peers evaluate their submission on a variety of dimensions. By examining trends in peer evaluation scores for individual participants over time, we can determine if peers rated participant analyses of student argumentation and their plans for instruction higher in later assignments than earlier ones, which would show evidence of learning from the course.

² See Appendix B for a copy of the post-course survey. The student language sample that respondents analyze as part of the survey appears as Question 6. The survey is administered via Qualtrics, so the formatting in the hard copy version provided here does not represent the formatting that respondents see.

In addition to this existing data, we will use ECRF funding to conduct interviews with course participants to better understand how participants' instructional practices as teachers did or did not shift as a result of the course. We plan to interview approximately 20 teachers and will engage in stratified sampling to ensure representation of teachers from a range of grade levels, content areas, geographic locations, and iterations of the course. We will also ensure representation of teachers who had a variety of structural supports for their MOOC participation (including no structural supports).

Research Question 2: Analyzing structural supports that facilitated learning for MOOC participants. To contextualize this research, it is useful to understand how and why individuals might have different structural supports for their MOOC participation. While anyone around the world with access to the online course platform ([NovoEd](#)) could participate in the MOOC, it was funded by the Oregon Department of Education to meet a pressing need for teacher professional development. In 2010, new standards outlining what students should know and be able to do were released and subsequently adopted by 42 states (Common Core Standards Initiative, 2015). The [Common Core State Standards](#) are designed to ensure that all students graduate from high school prepared for college or a career and are quite rigorous. Key shifts in the standards include an increased emphasis on critical thinking and an increased emphasis on reading and writing across all content areas. States, districts, and schools scrambled to find ways to provide professional development for teachers about these new standards. Currently, 20% of students in U.S. schools speak a language other than English at home (Ryan, 2013), and teachers were particularly concerned about how to help their students who were still in the process of acquiring English to meet the rigorous new standards. A poll by *Education Week* in the spring of 2014 found that only 50% of teachers felt prepared to teach the new standards to their students, and this percentage dropped to 25% when teachers were asked if they felt prepared to teach the new standards to English learners (Education Week Research Center, 2014). To fill this need, the Oregon Department of Education funded this MOOC and also provided grants to districts to support the implementation of new standards, particularly for English learners. Districts had the option of using a portion of their grant funds to support teachers' participation in the MOOC, among other activities.

Prior to offering this MOOC jointly with OSU, the Understanding Language team at Stanford University had offered five prior MOOCs, all incorporating the cMOOC principles. In several cases, a district had supported teams of teachers in MOOC participation, providing blended learning environments for these teachers. While MOOCs have been frequently criticized for their low completion rates, the Understanding Language team documented that among teachers in one district participating in a hybrid version of the MOOC that included in-person meetings in addition to the online material, completion rates were much higher. Specifically, among the 179 people who self-identified as hybrid participants, the completion rate was 79%. In contrast, among the 9,038 enrollees who did not identify as part of a hybrid program, the completion rate was 2%, which is in line with typical MOOC completion rates (Jordan, 2014).³

³ While we acknowledge the limitations of completion rates as MOOC metrics, for the Fall 2014 OSU/Stanford MOOC, the raw completion rate (the proportion of participants who completed all assignments) was 5% and the adjusted completion rate (out of the

Given that Oregon districts had the opportunity to choose whether and how they wanted to support teachers in MOOC participation, the course provided us with something akin to a natural experiment. On pre- and post-course surveys, we asked participants to indicate ways in which their school or district were supporting their MOOC participation, if any. Therefore, we are now able to observe and analyze patterns of course completion, as well as learning outcomes, among MOOC participants who had a variety of structural supports, including in-person meetings. We hypothesize that individuals participating in a hybrid version of the MOOC that included in-person meetings will have higher completion rates and stronger evidence of learning from the course (U.S. Department of Education, 2010). We will use existing data to compare raw and adjusted course completion rates, scores on pre- and post-assessments, and changes in peer evaluation scores received over time among participants receiving a variety of structural supports. As noted above, we will also conduct interviews with course participants who had a variety of structural supports for their MOOC participation to better understand the nature of these structural supports, as well as what participants found valuable or not valuable about them. Finally, we will interview administrators in two focal school districts that provided the most extensive set of structural supports to better document these supports and gather administrators' perspectives on the utility of particular supports.

Timeline and Dissemination Plan

Two collaborators will be essential to the successful completion of the research described here: Dr. Sara Rutherford-Quach from Stanford University and Dr. Diego Román at Southern Methodist University. We describe their roles here because they inform the timeline outlined below. Dr. Rutherford-Quach serves as Director of Academic Programs and Research for Understanding Language at Stanford University and co-created the original OSU/Stanford MOOC in collaboration with Dr. Thompson. She also served with Dr. Thompson as an instructor for both the Fall 2014 and Fall 2015 MOOCs. Dr. Román is partnering with Dr. Thompson and Dr. Rutherford-Quach to explore options for offering the MOOC a third time in Fall 2016. All three will collaboratively analyze data and engage in new data collection, writing, and dissemination of research findings, including using research findings to inform future MOOC design.

We currently have a complete dataset, including pre- and post-course surveys, student language samples, and assignment submissions with peer evaluations for the Fall 2014 MOOC. The Fall 2015 MOOC will conclude in late November, well before the March 28, 2016 start date for this project, so we will also have a complete dataset for this second iteration of the course. Work is underway to secure funding for a third iteration of the course in Fall 2016 in collaboration with Dr. Román at Southern Methodist University and the Region 10 Service Center of the Texas Education Agency. Region 10 is the second largest Education Service Center in Texas, representing a total of 812,655

participants who completed the first assignment, the proportion who completed all assignments) was 59%. As part of our research, we will calculate raw and adjusted completion rates among participants who received different types of structural supports for their MOOC participation, as well as analyze more detailed learning outcomes.

students and 53,178 teachers during the 2014-2015 school year⁴. We currently have IRB approval from both OSU and Stanford to analyze data collected as part of the Fall 2014 and Fall 2015 MOOCs. With this background, our timeline for our research is as follows:

Timeframe	Action
January-March 2016	Modify the existing IRB protocol approved at Stanford and OSU to include interviews of approximately 20 course participants and 2 district administrators. Also get IRB approval for the protocol at Southern Methodist University. Continue to secure funding for the Fall 2016 MOOC from state and foundation funds.
March-June 2016	Using stratified sampling, identify approximately 20 course participants to interview and develop interview protocol (April). Conduct interviews (April-May). For interviews with participants to inform the design of the Fall 2016 MOOC, it is important to conduct these interviews before the academic year ends and teachers leave for the summer. Continue to secure funding for the Fall 2016 MOOC from state and foundation funds.
June-August 2016	Analyze data, including pre- and post-course surveys and peer evaluation scores from the Fall 2014 and Fall 2015 MOOCs, as well as interview data collected in the spring of 2016. Dr. Thompson will focus on analyzing quantitative data, including the quantitative components of the pre- and post-course surveys and peer evaluation scores. Dr. Román will focus on analyzing interview data, participants' activity within collaborative spaces and in the discussion boards. Dr. Rutherford-Quach will focus on analyzing qualitative data from the pre- and post-course surveys.
September 2016	Plan revisions to the Fall 2016 course based on findings from data analysis conducted in Summer 2016.
October-December 2016	Offer Fall 2016 version of the MOOC. Share findings from data analysis with OSU, Stanford, SMU, and Oregon Department of Education stakeholders and the broader institutional communities. Submit proposal for the Online Learning Consortium Innovate conference. (This year proposals were due in November for the spring conference.)
January-March 2017	Draft at least two journal articles, one for each of the two

⁴ <http://www.region10.org/about-us/r10-demographics/>

	<p>research questions. Submit the article focused on research question 1, about participants learning from the course, including the impact of the course on teachers’ instructional practices, to an education research journal, such as <i>AERA Open</i>. Submit the article focused on research question 2, about structural supports that facilitate MOOC learning, to a journal focused on online learning, such as the <i>Journal of Online Learning and Teaching</i>. A white paper about the research project will also be prepared, to be published through the Extended Campus Research Unit.</p>
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Additional Research Underway in Relation to This MOOC

We envision this research as part of a broader research effort to learn from the MOOCs in which we have been involved. Our research agenda encompasses aspects beyond analyzing learning among MOOC participants and the structural supports that facilitate this learning. Specifically, the database of student language samples collected as part of this MOOC and other MOOCs offered by Understanding Language represent an important tool for understanding how specific language practices (argumentation, in the case of this MOOC) vary across grade levels and disciplines. An important research goal is to analyze the language samples gathered from teachers during the MOOCs in order to develop a set of tools and guideposts that practitioners and researchers can use to better understand and improve students’ academic language use and development, particularly for English learners. We are currently in conversations with [ETS](#) to explore ways in which their Natural Language Processing teams can support this work, facilitating descriptive studies of language practices for researchers and providing practitioners access to student language data against which they can benchmark the language produced by their students. We anticipate that this will lead to a joint grant proposal in collaboration with ETS. The suite of MOOCs developed by Understanding Language, including the OSU/Stanford MOOC, have received funding from a variety of sources, including the Gates Foundation, the Carnegie Corporation of New York, the Oregon Department of Education, and the S. H. Cowell Foundation. We continue to actively pursue funding from additional sources to enable us to offer additional MOOCs and learn from them.

Conclusion

Massive Open Online Courses represent a potentially powerful way to work towards two goals of OSU’s Strategic Plan: Goal 1: Provide a transformative educational experience for all learners; and Goal 3: Strengthen impact and reach throughout Oregon and beyond. Given that over 5,000 people enrolled in OSU’s first MOOC, including teachers from across all regions of the state and individuals from over 20 different foreign countries, this approach has the capability to reach many people for whom the educational opportunities at OSU might otherwise be inaccessible. However, to realize the potential of MOOCs such as this one, it is crucial that we better understand what supports meaningful learning among MOOC participants. The research project outlined here will serve as an important step towards answering these questions, helping OSU

understand whether and how to support MOOCs in the future and also moving the broader field of online learning forward in improving MOOC design and implementation.

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Appendix A: An Example of an Assignment Submission from a MOOC Participant, Including a Student Language Sample

I.i. Submit your argument sample

Introduction

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Subject Area / Topic

Chemistry

Grade Level(s)

11th

Objective

Write an argument

Prompt

Should a nuclear power plant be built in a county near ours?

Participants

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Student A

Female; Grade 11; Language Proficiency: Advanced; Primary Language: Spanish

Discourse

=====

(1) Student A: Nuclear Power plants⁵

I do not support the building of a nuclear power plant in Arkansas because it is not safe to the environment, it is expensive, and the work area is dangerous for the workers. The nuclear power plants could eventually become nuclear waste which could damage our environment. It doesn't help to reduce non-CO2 emissions. Its also not an answer to climate change. Another reason is because they are more expensive than renewable resources. For example other alternatives like wind and solar energy are less expensive. Finally its a dangerous work area for the people that work there because eventually someone could have an accident and put everybody else in danger. On the other hand some nuclear programs have been very safe and delivered a lower carbon footprint than other countries which burnt coal for the most of our electricity. However, Sweden for instance, has spent \$14 billion and rising to manage its radioactive and is now decommissioning its reactors. Never the less we've been using much longer.

II. Context

⁵ The actual text written by the student appears in italics below. The remainder of this appendix provides background information and the teachers' interpretation of the language sample.

1. Rationale for argumentation skill focus - For assignment three I have evaluate the student's written argument of the topic. I decided to do this because I want to compare the difference in the two delivery types for the ELL and the different forms of support the teacher gives or doesn't give to help the student be successful. Doing it this way informs me of the strengths and weaknesses of the students different language domains.

2. Specifics of the lesson - This is the last part of a unit on nuclear reactions. The class studied nuclear reactions for two weeks prior to the oral conversation (in assignment one) and took a test on the content. The week after the test, thye spent the week researching (teacher provided articles) the topic of nuclear power plants. This involved taking notes and writing an argument. The written argument was the last assignment in the unit.

3. Expectations - The teacher's expectations was for the students to write an argument including all the markers of a good argument (making a claim, reasons supporting the claim, presenting a counterclaim).

4. General background - The class is a general education chemistry class in a school of 4300 students. It is a class of 30 students including ELLs, native English speaking students, 504 and SPED students. The teacher is a certified teacher with an ESL endorsement. The teacher has created an environment where the students are confident and feel safe to experiment with language and has set routines in place to keep the students organized and knowing what to expect.

III. Rationale

I am the ESL designee at the school. I that work with students, teachers, parents, and administrators to ensure we are doing our best for ELLs. Helping them be successful at school and become career and college ready. Since, I am not in the classroom anymore during the day anymore I chose a class to observe and to collect samples from for assignment one and three. Rather than go into to someone's room to teach I decided to capture what is happening in a class, something authentic and relevant to what they are doing and should be learning at this time. This was less interuptive to the teacher, the students, and the learning.

IV. Argumentation Analysis Tool

Nuclear Power Plant

Dimension 1: Makes a claim

3

Rationale for Dimension 1

The student "clearly articulates a claim, as appropriate for the given context." The student says, "I do not support the building of a nuclear power plant in Arkansas because..." This is exactly what the teachers asked the student to do.

Dimension 2: Provides support for the claim

3

Rationale for Dimension 2

The student provides strong support for the claim. The student answer the questions, "What makes you that?" There are three reasons given and all have 1-2 supporting details supporting the explanation. Additionally the student provide a counterclaim and wraps up with a final example from as to why they remain with their original stance.

Dimension 3: Uses language to convey key relationships among ideas

3

Rationale for Dimension 3

The student effectively conveys a cause & effect relationship. They also use appropriate linguistic markers to help communicate the relationship. For example words or phrases like, "because," "Its also," "another reason," " on the other hand," and "however."

V.i. Reflections

I would have liked to see at least two details to support each explanation for her position. I would like to have seen more specific examples of how the work area is dangerous and how an accident could put everybody in danger.

If I were teaching the class I would want to see more support of the explanations and details backed up by articles read or news reports seen.

For the original reason I chose to analyze this sample as compared to the oral version in assignment one, I would now like to see the student provide the same amount or quality of delivery the oral argument as in the written argument. The written presentation of the claim is much stronger than the oral presentation.

V.ii. "Revised" argument sample

sample of revision....

"The nuclear power plants could eventually become nuclear waste which could damage the environment. *Nuclear waste can destroy trees and plants in the surrounding area and damage local water sources. Additionally the nuclear waste is dangerous to area wildlife according to the researchers at the state wildlife refuge department.*"

"Finally its a dangerous work area for the people that work there because eventually someone could have an accident and put everybody else in danger. *In a recent report a small error can create chemical spills or explosions creating harm and dangers to everyone in the work area. In addition to that scare the doctors at MD Anderson hospital in Texas have*

studied hundreds of cases of people with cancer and other fatal health needs that worked at nuclear power plants at some point in their adulthood."

V.iii. Instructional strategies

If I were the teacher or if I were to offer suggestions to the teacher I would consider the following ideas for both the oral and written argument.

* find videos online or use videos of past students, watch the videos and let the students use the analysis tool to "grade" the success of the argument. after each video we would discuss and highlight the strengths and weaknesses so they can incorporate the same in their oral presentations. I would do the same activity above but we would analyze written arguments.

* I would model the entire process of analyzing a sample and also writing an argument. I would go a think aloud as I complete the process in front of the class.

* I would reteach how to do some quality researching and how to research to better support your argument both orally and written.

I would ask and create probing questions in an attempt to get the students to think deeper and create some drive or interest to go further with the support of their stance.

* before delivering the prompt and setting them to work I would first tap into their previous knowledge to see what they already know, I would build background of the topic, I would use Culturegrams to see if there is related information from the ELLs home country, and I would put pictures with vocabulary around the room and newspaper articles related to the nuclear power plant topic. I would find news clips about nuclear power plants to show them as part of the beginning prep work.

* I would possibly use an outlined, organized model of the entire process. This would be very good for lower language speakers, struggling students, and students that missed lots of class time. It would take them through the entire unit including the learning and the assignments. This would give them a frame to work within for success.

* I would really like to see this prompt presented in a socratic circle

V.iv. Major takeaways

* it is so very important to know the students

* the students writing skills are better than speaking skills

* more speaking opportunities need to be offered to strengthen the argumentation skills and to build confidence to participate in an oral argument

* this particular students needs to continue to be given opportunities to multiple opportunities and in different formats to present an argument

* the students use of language in the written example is representative of her ELL level. A good delivery with good linguistic markers to reveal progress and ability to communicate

the things I want to see are those things that will come as the student progresses from an advanced speaker to a more confident fluent speaker.

Appendix B: Post-Course Survey -

OSU-End of Course Survey (Fall 2014)

Q1 Thank you so much for participating in our course, Supporting English Language Learners under New Standards. We have been blown away by your contributions, insights, and dedication to your students. Before you begin with Session 4, the final session, we would like you to complete this short survey about your course experience. Most of the questions are short answer or multiple choice; completing it should not take you more than 15 minutes. We hope to use the results of this survey to improve future courses and gauge interest in a continuation of this online community. Thank you again. It's been an honor and a pleasure to work with so many hardworking education professionals who are obviously committed to providing their students, and particularly their English learners, with the best education possible. Sincerely, The MOOC Teaching Team

Q2 We want to start off with five questions to understand how you currently think about argumentation.

Q3 How knowledgeable do you currently feel about supporting students in constructing arguments?

- Not very knowledgeable (1)
- Somewhat knowledgeable (2)
- Knowledgeable (3)
- Very knowledgeable (4)
- Extremely knowledgeable (5)

Q4 How would you currently define and describe the most important features of an effective argument?

Q5 How well prepared do you currently feel you are to set-up and facilitate argumentation (either oral argumentation or argument writing) in your/a real-life classroom?

- Not very well prepared (1)
- Somewhat well prepared (2)
- Well prepared (3)
- Very well prepared (4)
- Extremely well prepared (5)

Q6 Please read through and then evaluate the following oral language sample from two middle school students, in which the students engage in argumentation, on the components that follow. Context: In this 6th grade English language arts lesson, students were asked to read a story about Hua Mulan, the Chinese heroine who disguised herself as a boy to fight in place of her father in the Chinese army. Prompt: Do you think Mulan was a hero? Use the following sentence frame to begin your conversation. "I think Mulan was [was not] a hero because... ." Objective: Students will be able to construct an argument about whether Mulan was a hero using evidence from the text. 1. Student A: I think Mulan was a hero. She fought in the war. She saved her father from getting punished. 2. Student B: I agree. But she lied. She never told the truth. They found out the secret. She got hit in the stomach. Then they went inside and saw the stuff... she was a girl. Then she became the other guy. 3. Student A: I agree that she lied but she was still a hero. At that time girls were not allowed to be in the war. So, she saved her father and fought in the war. And all the things that she did wrong was lie. Evaluate the argument constructed by Student A on the following discourse features. Score each feature a 4, 3, 2, or 1. A score of 4 signifies that the conversational excerpt prominently displays this feature; a score of 1 signifies that the excerpt does not display this feature at all.

- _____ a. Makes a claim (1)
- _____ b. Provides support for the claim (2)
- _____ c. Uses language to effectively convey relationships among key ideas (3)
- _____ d. Grammar (4)
- _____ e. Vocabulary (5)

Q7 If the above example of argumentation were to occur in your classroom, what do you think would be the most appropriate instructional course of action to take either during or after the students' interaction? Please order the possible answers to signify how likely you would be to adjust your teaching in this way, with your most likely course of action at the top, your second-most-likely course of action in the second slot, and so on down to the bottom. Place the answers in order by clicking on the text of an answer, dragging it up or down, and dropping it to be in the correct order.

- _____ Provide students with a framework for thinking about the components of an effective argument (1)
- _____ Provide more time for students to select textual evidence to use in argumentation (2)
- _____ Provide additional sentence frames that students could use in future argumentation (3)
- _____ Rephrase student response with correct usage of grammar and/or vocabulary (4)
- _____ Pre-teach vocabulary before next interactive opportunity (5)
- _____ Model sample argumentation before next interaction (6)
- _____ Model evaluating the quality of evidence and/or reasoning used in argumentation (7)

Q8 How satisfied are you with what you learned about supporting students in engaging in argumentation?

- Very Dissatisfied (1)
- Dissatisfied (2)
- Neutral (3)
- Satisfied (4)
- Very Satisfied (5)

Q9 Which of the following areas of learning represent important takeaways for you? (check all that apply)

- What argumentation components are (i.e., claims, evidence, reasoning) (2)
- How to set the stage for argumentation in the classroom (9)
- How to model and/or scaffold argumentation skills (i.e., making a claim, providing support for the claim, evaluating the quality of support for a claim, using language to convey relationships among key ideas) (3)
- Importance of argumentation (4)
- What makes an effective argument (5)
- How to analyze student-to-student conversations using the Argumentation Analysis Tool (AAT) (6)
- How to use argumentation analysis to plan future lessons, interactions, and interventions (1)
- Link between this work and Common Core State Standards requirements (7)
- Other (8) _____

Q10 How prepared do you feel to change your instructional practice based on what you have learned?

- Not at all prepared (1)
- Somewhat prepared (2)
- Prepared (3)
- Well prepared (4)
- Extremely well prepared (5)

Q11 In what ways have you already changed your instructional practice with respect to argumentation? (If you have not changed your instructional practice, write that.)

Q12 In what ways do you plan to change your instructional practice with respect to argumentation? (If you do not plan to change your instructional practice, write that.)

Q13 To what extent did the following course components contribute to your learning?

	Made no contribution (1)	Made a minor contribution (2)	Made some contribution (3)	Made a substantial contribution (4)	Made a major contribution (5)
Videos (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Required readings (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Optional readings (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual assignments (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Peer evaluations (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Team discussion board (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forum discussions (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14 How would you describe your motivation level to participate in this course when you enrolled?

- Very weakly motivated (1)
- Weakly motivated (2)
- Somewhat motivated (3)
- Strongly motivated (4)
- Very strongly motivated (5)

Q15 Rate how strongly, if at all, each of the following factors RAISED your motivation to participate in this course.

	Not a factor (1)	Minor factor (2)	Something of a factor (3)	Substantial factor (4)	Major factor (5)
Statement of Accomplishment (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Desire to improve education for English learners (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Common Core implementation (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Someone else recommended it (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional Development credit (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16 Rate how strongly, if at all, each of the following factors LOWERED your motivation to participate in this course.

	Not a factor (1)	Minor factor (2)	Something of a factor (3)	Substantial factor (4)	Major factor (5)
My team never materialized (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The online platform was difficult for me to use (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My team was disorganized or not engaged (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I did not understand the instructions (4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I did not have time to complete the assignments (5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The course did not seem useful to me (6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I no longer needed the professional development credit (7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q17 At any point during the course did you change your participant status from a fully-enrolled student to an auditor?

- Yes (1)
- No (2)
- Started the course as an auditor (3)

If Yes Is Not Selected, Then Skip To Why did you choose your team? (check ...

Q18 If yes, why did you change your status to “auditor” and at what point in the course did you make this change (e.g. after Assignment 1, etc.)?

Q19 Why did you choose your team? (check all that apply)

- Similar geography (1)
- Similar or complementary educator roles (2)
- Interest in similar topics (e.g. SPED, Instructional technology) (3)
- Other similarities (e.g. former EL status, etc.) (4)
- Randomly (5)
- Real-life colleagues (6)
- Similar grade-levels (7)
- Similar content areas (8)
- Other (9) _____

Q20 When you first joined your team, how well did you know your teammates? Please select all that apply.

- Not applicable. (1)
- I knew their professional backgrounds (e.g. by reading their profiles). (2)
- I knew what they hoped to get out of this class. (3)
- I was previously acquainted with them before the class. (4)
- I felt comfortable sharing my teaching methods and challenges with them, for their constructive feedback. (5)

Q21 At this point in the class, how well do you know your teammates? Please select all that apply.

- Not applicable. (1)
- I know their professional backgrounds (e.g. by reading their profiles). (2)
- I know what they hope to get out of this class. (3)
- I feel that I am now acquainted with them. (4)
- I feel comfortable sharing my teaching methods and challenges with them, for their constructive feedback. (5)

Q22 How effective was your team in discussing upcoming tasks?

- Not at all effective (1)
- Effective on one occasion (2)
- Occasionally effective (3)
- Usually effective (4)
- Extremely effective (5)

Q23 How effective was your team in discussing how to improve practice?

- Not at all effective (1)
- Effective on one occasion (2)
- Occasionally effective (3)
- Usually effective (4)
- Extremely effective (5)

Q24 How frequently did you post on your team's discussion board?

- Never posted in team discussion board (1)
- Posted once in team discussion board (2)
- Posted occasionally but posts were generally superficial (3)
- Posted occasionally and posts were substantial (4)
- Posted often and posts were substantial contributions (5)

If Posted often and posts were... Is Selected, Then Skip To How could the team experience be impr...

Q25 If you did not post (or did not post often) in your team's discussion board, why not? (check all that apply)

- Had nothing to contribute (1)
- Didn't have time (2)
- Didn't know what to say (3)
- Didn't realize I was supposed to (4)
- Other (5) _____

Q26 How could the team experience be improved? (check all that apply)

- More clarity on role of team lead (1)
- Teams selected by NovoEd or course instructors (2)
- Clearer instructions for team forming process (3)
- Clearer instructions for team tasks (4)
- Other (5) _____

Q27 To what extent did you read and/or post on the participant forum?

- I did not read or post on the participant forum at all (1)
- I read some forum threads, but did not post myself (2)
- I read form threads and posted on the forum at least once (3)
- I read and posted on the forum occasionally (4)
- I read and posted on the forum frequently (5)

Q28 Is there anything else that you think the instructors should know about how teams worked for you this course? Do you have any suggestions for the future?

Q29 To what extent did you complete the assigned readings?

- I have not yet read any of the assigned readings (1)
- I read a few of the required readings (up to Session 3) (2)
- I read most of the required readings (up to Session 3) (3)
- I read all of the required readings (up to Session 3) (4)
- read all of the required readings and some optional readings (up to Session 3) (5)

Q30 How easy or difficult did you find online platform (i.e. the way the course was set up) to navigate?

- Very Difficult (1)
- Difficult (2)
- Neutral (3)
- Easy (4)
- Very Easy (5)

Q31 If you had difficulty navigating the site or were confused about any of its online features, which, if any, of the following contributed to this difficulty? (check all that apply)

- Homepage messaging about assignments was confusing (1)
- I never received notification that teammates responded to my journal post(s) (2)
- There were too many versions of the same assignment (3)
- Peer evaluations were difficult to navigate (4)
- I thought certain assignments were not required because of captioning on the assignment list (5)
- This was the first time I had taken an online course (6)
- I did not experience any difficulty or confusion during my online experience (7)
- Other (8) _____

Q32 Which of the following represent aspects of the course that need the most improvement?

	No improvement needed (1)	Slight improvement needed (2)	Significant improvement needed (3)	Very significant improvement needed (4)	No opinion or N/A (5)
Videos (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Readings (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with team members (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Team discussion board (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with team members (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Team selection (e.g. process of forming teams) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participant Forum (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication with instructors and assistants (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NovoEd platform interface (i.e. online organization of course) (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q33 Is there anything else that you think the instructors should know when evaluating the results from this course?

Q34 Is there anything else that the instructors should keep in mind when designing future MOOC courses?

Q35 Are you an Oregon educator?

- Yes (1)
- No (2)

Q36 For Oregon educators, we would like to ask again if your school and/or district supported your participation in this course in some way. Please mark all ways your participation in this course is being supported below

- I have release time to participate in activities related to the MOOC. (2)
- I am receiving a stipend to participate in the MOOC. (3)
- I am participating in the MOOC along with a team of colleagues from my school and/or district. (4)
- Our school, district, and/or ESD is providing a facilitator to support my colleagues and I in activities related to the MOOC. (5)
- My school and/or district is supporting my participation in the MOOC in another way. (Please describe below.) (6) _____
- I am participating in the MOOC without any explicit support from my school and/or district. (7)

Q37 How knowledgeable do you feel about Oregon's new English Language Proficiency Standards?

- Not very knowledgeable (2)
- Somewhat knowledgeable (3)
- Knowledgeable (4)
- Very knowledgeable (5)
- Extremely knowledgeable (1)

Q38 How comfortable do you feel aligning your practice to Oregon's new English Language Proficiency Standards?

- Not very comfortable (1)
- Somewhat comfortable (2)
- Comfortable (3)
- Very comfortable (4)
- Extremely comfortable (5)

Q39 How likely are you to use strategies from the MOOC in your classroom?

- Very Likely (14)
- Likely (15)
- Undecided (16)
- Unlikely (17)
- Very Unlikely (18)

Q40 How knowledgeable do you feel about the Oregon English Language Proficiency Standard we focused on in this course: ELP Standard #4: An ELL can construct grade-appropriate oral and written claims and support them with reasoning and evidence.

- Not very knowledgeable (1)
- Somewhat knowledgeable (2)
- Knowledgeable (3)
- Very knowledgeable (4)
- Extremely knowledgeable (5)