How this coding manual will be used?

Previous work in the field of CSCL (computer supported collaborative learning) have found that discussion could facilitate learning in traditional contexts, including classrooms, and intelligent tutoring systems. (Chi et al., 2001; Cohen, 1994) However, discussion in a MOOC context is less scaffolded and supported. We developed this coding manual to capture students' discussion behaviors that are associated with learning based on Michelene Chi's ICAP framework. (Chi and Wylie, 2014)

In this framework (Chi and Wylie, 2014), the authors focus on the amount of cognitive engagement that can be detected by smaller grained behavioral activities while students learn instead of from a large-grained behavioral and emotional perspective. And in terms of operationalizing these cognitive processes, it's also proposed in the paper that "Students' engagement with learning materials can be operationalized by the overt behaviors they undertake while learning. Although far from perfect, overt behaviors are a good proxy to reflect different modes of engagement that teachers can use to ascertain whether a student is in fact engaged in a specific mode for a given activity." (Chi and Wylie, 2014)

While in traditional education context, researchers have the opportunity to observe learners in presence, which provides a chance for them to capture a larger variety of overt activities, including students' body gestures and different kinds of learning outputs. In a MOOC context, while we're provided with large volume of clickstream data, but at the same time we are losing information on the representation of students learning processes. And in a MOOC context, discussion forum is considered to be a gold mine of information on how students learn, from which we are able to capture students' overt activities which show their cognitive processes while they learn.

However, at the same time, we're fully acknowledged that only a small number of students really participate in discussion forums. On the one hand, we'll try to resolve the sparsity issue in our analyses in related papers; on the other hand, we think it's a first step towards analyses of learning in a MOOC context. We also think that capturing these discussion behaviors will help elicit learning activities that associate with the most learning in the future.

This coding manual is developed to code learning activities in a MOOC discussion forum. We operationalized the coding manual in he course named "Introduction to Psychology as a Science", which is offered through Coursera collaboratively by Georgia Institute of Technology and Carnegie Mellon University. We only operationalized this coding manual in one course, and achieved good agreement on the dataset. Two coders coded 40 posts, and achieved Kappa of 0.721 and weighted Kappa of 0.864. We designed it to be a generalizable coding manual to be applied in other MOOCs as well.

Interactive-Constructive-Active-Passive Framework

In brief, Chi and Wylie (2014) propose that there are different modes or categories of "active learning", corresponding to different overt behaviors that elicit different knowledge change or learning processes. And they proposed that learning activities and their resulting overt engagement behaviors can be differentiated into one of four modes: interactive, constructive, active or passive.

I'll borrow the definitions (*italicized*) given in the Chi and Wylie (2014) paper to explain the differences between these four categories. And how we operationalize the four categories will be introduced later in this coding manual.

Passive: *Passive mode of engagement is defined as learners being oriented toward and receiving information from the instructional materials without overtly doing anything else related to learning.*

Active: *Learners' engagement with instructional materials can be operationalized as active if some form of overt motoric action or physical manipulation is undertaken. Active activities differentiate from passive activities in that passive activities are carried out mindelessly.*

Constructive: *Constructive behaviors are defined as those in which learners generate or produce additional externalized outputs or products beyond what was provided in the learning materials. To meet the criteria for constructive, the outputs should contain new ideas that go beyond the information given; otherwise such behaviors are merely active/manipulative.*

Interactive: *interactive behaviors should meet two criteria (a) both partners' utterances must be primarily constructive, and (b) a sufficient degree of turn taking must occur.*

In a MOOC discussion forum, as long as the student contributes an on-topic post, we consider it to be active behavior, that's why we don't have the passive category in our coding manual. Our definition of interactive behavior is different from Chi's framework. As students rarely take turns in conversations in the discussion forum, we hardly see "perfect" interactive activities as defined. We categorize a post as interactive, if the post is constructive, and that there is a clear counterpart in the conversation. Although in a MOOC context, most conversations happen between people, but there actually are very few posts that can be considered as really "interactive". For a lot of times, students are posting in discussion forums in a self-explanation way, e.g., monologue, without pointing to or making connection with their peers' opinions, we also want to argue that discussion forum hasn't been really used in an interactive way in a MOOC context right now. So we restrict interactive behaviors to be those discussions that are constructive and show that students' are pointing to, building upon, making connections to, or challenging some one else' ideas.

Development process: difficulties we come across

In real development of this coding manual, we came across a lot of difficulties. In this section, I'll introduce some decision-making steps we took throughout the process.

In the first version of it, which is applied in the Wang et al. (2015) paper, the categories of *Active*, *Constructive* and *Interactive* are not mutually exclusive. We found some problems using the coded data in the analysis. Because different categories are not mutually exclusive, there is high correlation between different categories, and it's hard to detect the influence of a single variable. In this new version of coding manual, we designed all categories to be mutually exclusive.

Another problem came up was that it was hard to tell whether a post is on-task or off-task if the post doesn't contain substantial content, and it's also hard to distinguish between constructive and interactive behaviors without reading the context of the post. In the new coding manual, we also provide context for each post as reference.

Throughout the development process, we combined certain categories, and assume there to be an order among the categories in terms of the level of cognitive engagement with the materials. We also clarified some border-line examples with the hope that the coding manual can accurately and validly capture students' different level of cognitive engagement displayed in the discussion forum.

References:

Chi, M. T., & Wylie, R. (2014). The ICAP framework: Linking cognitive engagement to active learning outcomes. Educational Psychologist, 49(4), 219-243.

Chi, M. T. H., Siler, S., Jeong, H., Yamauchi, T., &Hausmann, R. G. (2001). Learning from human tutoring. Cognitive Science, 25, 471–533.

Cohen, E. G. (1994). Restructuring the classroom: Conditions for productive small groups. Review of Educational Research, 64, 1–35.

Wang, X., Yang, D., Wen, M., Koedinger, K., & Rosé, C. P. Investigating how student's cognitive behavior in MOOC discussion forums affect learning gains.

Instructions

In this coding manual, you're asked to code cognitive behaviors in students' posts in a MOOC discussion forum. Each post/comment is provided with a context for this coding.

For posts, the first column is the post you're going to code, the second column is the first post in the thread, and the third column is the previous post (if there is any). For comments, the first column is the comment you're going to code, the second column is the corresponding post, and the third column is the previous comment (if there is any). We treat posts and comments as the same in this process.
When you code, you only need to consider the content of the post itself, but when there are references that are not clear in the post itself, consult the thread starter first, and the previous post then to get a context for the post. It's not guaranteed that the thread starter and the previous post will provide a clear context for the post you're going to code, but you need to take best advantage of the two posts to understand the context.

You should first decide whether a post is on-task or off-task. The definitions of on-task discourses and off-task discourses are displayed below. As long as there is on-task content in the post, it will be coded as on-task discourse.

Here are examples when you need to refer to the context to determine whether the post is on-task or not.

Example 1:
Post:
Thank you. That does make sense.

Thread starter:
In the link provided in the OLI textbook, it's stated that clinical psychologists must understand the empirical research on measurement and evaluation. In addition, they must be able to synthesize this large amount of research data, using the appropriate testing instruments for their client population. What methods are used to diagnose mental illness?

Previous post:
Generally, there are diagnostic criteria to meet, but making the call is a highly subjective process. When someone has an illness like heart disease or diabetes, it is a combination of symptoms and tests that points a physician to that condition. With mental illness, the practitioner does interviews, looks at family history, lifestyle choices and conducts surveys but eventually, it boils down to making an assumption. That is part of the dogmatism of the mental health industry and why it is not as well received as other heath care practices. The process is becoming more scientific, however, because research is finding genetic markers for mental issues.

In this example, when looking at the post only, we're not sure about whether the post is on-task or not. But the thread starter and previous post provides the context that the post is about what methods are used to diagnose mental illness, and it is considered to be on-task.

On-Task Discourse:

Definition:
The student talks about content that is related to course materials, including lecture videos, quizzes and assignments. As long as the post is talking about the content of the course, it will be considered as on-task. When students are reflecting on their personal experience which are related to course content, it is also considered as on-task.
If the post shows that the student is to some extent engaged with course materials, or shows that the student is paying attention to course materials. It will also be considered as on-task discourse. For example, if the student is talking about grades, talking about grades itself is considered to be off-task, but because of it shows that the student is engaged with course materials (quizzes and assignments), it's categorized as on-task.
Another situation is that the post doesn't contain substantial content, but according to the context of the post, if the conversation is about course content, the post will be considered as on-task, as it shows that the student is paying attention to course materials.

Example 1:

Good to see scientific method highlighted in the first week. Not sure why the focus of this was research on house flies. Wouldn't an example from psychology be more interesting? I guess using scientific method to research questions of psychology may be more complex but that's why we are studying. What do you think?

Example 2:

I think the issue is around the definition of 'instinct'. Instinctive or innate behavior is a behavior that is not learnt and is thus mostly genetically determined; whereas chaos is caused by *irrational* behavior :)

In example 1, the user is pointing at resources in the course, and in example 2 the user is talking about content that is covered in the course, so both of them are categorized as on-task discourse.

Example 3:

I have to add that I just open the video 3 of week 2 (where I left) and saw the professor again for 5 min into the video and I just wanted to hug him and tell him thank you sir! just thank you! =')

In this example, the user isn't making any substantial comment on course materials, but it shows that the student is engaged in course materials by watching videos, so this is categorized as on-task.

Example 4:
Me too. Hope it gets fixed soon...

Thread starter:
My name is NAME3034192. I have not earned a Statement of Accomplishment as I have got 63.4% according to the course records. But there seems to be an error in the calcuation. My final grade of 30 % has not been added to the grade. Kindly look into this immedietely and send me the Statement of Accomplishment as I would be passing with distinction. Here is the calcution of my grade: Total Grade: Quiz 1 : 10 Quiz 2 : 10 Quiz 3 : 9 Quiz 4 : 9 Quiz 5 : 10 Quiz 6 : 9 Quiz 7 : 10 Quiz 8 : 10 Quiz 9 : 10 Quiz 10 : 10 Quiz 11 : 9 Left out Total Quiz : (97/100) x 30 = 29.1% Assignment 1 : (21/23) x 20 = 18.26% Assignment 2 : (12/15) x 20 = 16% Final Grade :(35/35) x 30 = 30% Total Grade : 93.36 % The Quiz and the assignments have alone been added and it comes to 63.4%. Please look into it immediately. Thanks in advance.

Previous post:
Same problem. My calculation came out to something in the 70s, but my final grade is listed in the 50s. Looks like I'm not the only one...

In this example, when looking at the post only, we're not sure about whether the post is on-task or not. But the thread starter and previous post provides the context that the post is about grade calculation, which shows that the student is paying attention to course materials, so it's also categorized as on-task .

Example 5:

Post:
Thanks Alex.

Thread starter:
Just to be clear, we only have to design an experiment by listing project design, independent and dependent variables and outline the procedure, right? Do we have to have to tell in which area or on what precious studies our experiment is based or not ? And also should we presume at all what the result of our experiment will be based on previous works on the same topic or should we leave out the result part completely? please staff ,help!

Previous post:
So, I guess that "smaller" experiments, such as Classical Conditioning, are not evaluated as proper experiments?!

In this example, when looking at the post only, we're not sure about whether the post is on-task or not. But the thread starter and previous post provides the context that the post is about course content, which shows that the student is paying attention to course materials, so it's also categorized as on-task .

Fail Example:

I got interested into psychology after studying about dreams, On top of that, I have OCD so I hope that one day I can cure it and help others with similar problems too, because I can understand what they're going through.

In this example, although the user mentions psychology and psychological terms, the post was mainly introducing the student's background and motivation, it's not related to course content, so it's considered to be off-task.

Off-Task Discourse:

Off-task mainly means the opposite of on-task. If the post doesn't contain on-task content, it's considered as off-task. Usually off-task discourses include social networking, self-introduction of students. For example, when the student is introducing him/herself, or replying to others' posts with the main purpose of social networking. The student might mention psychology while introducing his/her background, what draws him/her into the field of psychology or this course, which specific area of psychology he/she is mostly interested in, and these descriptions (even related to psychology) are considered as off-task.

Example 1:

Hello, I'm NAME15258. I signed up for the other MOOC, Why We Need Psychology, to have a refresher on Gen Psych. I'm glad this course is offered too, so much earlier this year so I can begin brushing up. Psychology is very useful. You can't get enough with just a single class.

In this example, the user is trying to introduce him/herself.

Example 2:

Post:
Yeah, I totally agree to you. Hope we can get the knowledge we want in this course. Good luck to both of us!

Thread Starter (Previous post):
Hello fellow coursemates!!
Hope everyone's excited about the course as I am. I am 28 and live in Michigan. I am an HR professional and constantly interact with people and everyday is a new exciting challenge. I enrolled in this course so that I can learn the intricacies of human mind and thinking. I dont want to just understand how other people think but aIso want to understand how I appear to other people. Hence I want to use the learning in my personal and professional life. I am very excited about sharing this learning space with each one of you and hope to learn as much from each other as well. Looking forward to interacting with you.
Cheers!
Madhu

In this example, it's also hard to tell whether the post is on-task or off-task from the single post. But from the context, we can tell that the conversation is social networking not relevant to course content, so this post is categorized as off-task.

Fail Example 1:
The problem summary: Video playback is very soft .. is this only me? My volume controls are on maximum, and I have to listen very carefully to hear what is being said.

Fail Example 2:
I'm not Alex, but 10.5 means you got 45.6% (out of 100) on that assignment. This plus your score on the next assignment will be averaged and count as 40% of your final grade. See the syllabus for more on the grading policy.

In both examples, the students talk about administrative issues, but they show that the students are paying attention to course materials, so they are both categorized as active behavior.

Decision Tree

After deciding whether a post is on-task or off-task, for on-task discourses, you should decide which specific categories of cognitive engagement each post belongs to. Some posts contain both on-task and off-task discourses, as long as a post contains content that is on-task, it's a flag that further coding will be done on the cognitive behaviors displayed in the post.

A post will belong to a highest order category, for example, if a post demonstrates both interactive and constructive behaviors, it should be categorized as interactive. The detailed definition of each category is presented below in the order from high cognitive engagement to low cognitive engagement.

When given an on-task post, you should first decide whether there are interactive behaviors in it. If there is clearly a counterpart in the conversation and the user is being constructive in the post, this includes elaborating on, pointing to, building upon and challenging their partners' ideas, the post should be categorized as interactive (I).

If a post doesn't contain any interactive behavior, you should then decide whether the post contains constructive behavior. If the user displays reasoning in the post by elaborating on a point, explaining a phenomenon, making a cause and effect relationship or comparing two conditions, it will be categorized as C1. Otherwise, if the post doesn't contain any explanation or reasoning, but it proposes a new idea, or contains content that is related to the course but go beyond what's covered in the course, for example referring to relative external resources. The post will be categorized as C2.

One thing to notice here is that interactive and constructive behavior has to be course content related (in this case, psychology). If the student is reasoning about scoring rubric, that's categorized as active behavior, because that only shows the student is paying attention to course materials, but not that he/she is engaged in constructive behavior for the purpose of learning.

If a post doesn't contain any constructive behavior, you should then decide which category of active behavior the post belongs to. If the user is displaying engagement with course materials in the post by paraphrasing, repeating, or mapping resources, which shows the student is actively engaged in course materials, and referring to specific content of course materials, it will be categorized as A1. Otherwise, if the student doesn't mention specific course content, but displays that he/she is paying attention to course materials by mentioning general learning activities, it's categorized as A2.

In this decision tree, we're only providing brief definition of each category, while in practice you should consult detailed definitions of each category as shown below.

Interactive (I)

Definition:
According to Michelle Chi's ICAP framework, we want to capture students' discussion behaviors that represent their underlying cognitive processes. As we consider interactive behavior to be a higher level of behavior than constructive behavior, we define interactive behaviors to be based on constructive behaviors.

For a post to be interactive, it should be 1) constructive 2) targeting at a specific counterpart. This includes elaborating on, pointing to, building upon and challenging their partner's ideas.

In order for a post to be coded as interactive, there needs to be a clear counterpart in the conversation, and the counterpart's contribution should be an input for the post. Responding to questions without acknowledging their partners' contribution doesn't count as interactive behavior, it's considered as self-explaining process.

Example 1:

"However, I think your model is based on the ways of collecting data (and processing follows from them), whereas the video suggested we understand methods primarily through the things we can do with the data."

Example 2:

"Hi Leah, I don't think the boy is the US, I think "something" (probably all they talk, the situation, smiles, looks, chemistry, etc) made her "fall in love for that boy", so the "something" would be the US and "fall in love with that boy" the response UR.

Example 3:

"My opinion...on your first point, survival, a newborn has no survival instinct. It will just sit there and eventually die if no one comes to it's aid."

Example 4:

"To further understand this, you might wanna have a close look at "http://upload.wikimedia.org/wikipedia/commons/c/c0/Gray722.png" this. The red lines depict axons from the outer (aka temporal or lateral) half of both the right and left visual fields, blue the inner (aka nasal or medial). The inner visual fields cross to the other side via the optic chiasm, so - just as Leah already stated - signals from the right visual fields reach the left primary visual cortex and vice versa. The pictures found "http://en.wikipedia.org/wiki/Visual_field#Visual_field_loss" here will be also interesting to further understand this anatomy."

Example 5:

If am guessing correctly about which option you got confused with the right answer, you should go back and read the wordings of the other option... It's about the way it's phrased...there is a difference between creating and perceiving...

Fail Example 1:

Comment: "I just saw over in the other thread that Case Studies are a sub category of the Descriptive Method. So all in all, there are three methods: Descriptive, correlational and experimental."

Corresponding post: "Hi, I think there was just a mistake with the numbering. When the prof. reviewed them in the end, Descriptive method was first, followed by Case Studies, Correlational Studies and the Experimental Method. Hope that helps. "

In this example, according to the context, the user is responding to the post with a disagreement. But this is not categorized as interactive behavior, as the user is simply paraphrasing or repeating materials that's mentioned without constructing any new ideas.

Fail Example 2:

Post: "There is not much I could add to your comments. However, I wish we should not end up so suddenly. There must be enough space and opportunity for all of us who wish to do so to meet again during the course of a higher level inquiry into the workings of the mind and shaping of behavior. Thank you all."

Thread starter: "Hello everyone. I've just realized that this course comes slowly to an end. And to be absolutely honest, I don't want it to end! Never could've thought that I would say so, but it's true. The course itself by Mr.Anderson, the lectures and the OLI material are;in the majority constructed and presented in a way that to my brain they function like a fairy tale! So everything that would normally seem tough and much harder even to grasp, I can really understand efficiently. So, after thanking Mr.Anderson and his team, I wanted to place a question: Will there be, sometime, a part II in this course? Pleeeease!"

Although there is a clear counterpart in this example, the conversation is off-task, so this isn't categorized as interactive behavior.

Fail Example 3:

"Impressive assigment, Caroline. I would have given you top marks, it's well researched and very clear. How much time did you spend?; Mine is less scientifc, I got just 14 points...."

Similar with fail example 2, although it's an interactive conversation, the students are not talking about course content related topics. Although this post is categorized as on-task, because it shows the student is paying attention to course materials. But interactive activities are defined as course content-related.

Constructive—Elaboration and Reasoning (C1)

Definition:
If the user displays reasoning in the post by elaborating on a point, explaining a phenomenon, making a cause and effect relationship or comparing two conditions, it will be categorized as C1.

Situations include:
The user gave a statement and tried to explain or elaborate it. This includes that the user provides specific examples, including scientific evidence or personal experience and elaborate on them to make an argument.

The user provides reasons to justify his statement. The reasoning can either be making a cause and effect relationship or comparing or contrasting different situations. This could be indicated by explicit words such as "because" "reason" "difference between", "comparing", etc.

In this category, the user is trying to explain "why" he/she is thinking this way.

Example 1:

"There is a link in OLI textbook to BBC website. but some informations do not match with OLI (and other sources):- visual information are processed by occipital, temporal and parietal lobes- balance information is processed by temporal lobe"

In this example, the user is trying to compare the content of OLI textbook to some external resource. This is categorized as C1.

Example 2:

"I was just reading through some of the text and on page 54 in the first paragraph it says, "It has been estimated that the human visual system can detect and discriminate among 7 million color variations, but these variations are all created by the combinations of the three primary colors: red, green, and blue." I have never heard of green being a primary colour, I was taught it was red, blue and yellow. Just want to make sure this is not an error. Thanks so much."

In this example, the user is trying to compare the content of textbook to his/her prior knowledge. This is categorized as C1.

Example 3:

This is the link to an animation about drugs and neurotransmission. Alcohol is said to inhibit excitatory channels, and Caffeine is said to "inhibit adenosine neurotransmission". But the animation for the both cases is the same (green squares

block the "neurotransmitter detectors"). So, what's the difference between these two processes?

In this example, the user is trying to understand course-related content by making comparisons. This is categorized as C1.

Example 4:

I think the studies on social learning about aggression are very powerful, but feel that the behavioural response surrounding aggression is far more complex than these experiments demonstrate. There is so much violence on tv in the news, movies etc, the most popular computer games are those with violence in them, are they just feeding a natural behaviour in human beings? Violence is throughout our history and have shaped societies, is it really as simple as an observed response? or a throwback of survival instinct?

In this example, the user is trying to make an argument and provides evidence which are social facts to support the argument, which raises further questions.

Example 5:

“We firstly hear, seeing the lips is a bonus, like a tip to help us understand. For example, when there's a lot of noise and you hardly understand what they're saying to you, you have the tips by "reading" lips. In dubbed movies what they say is completely different and we know it so we don't rely on lips. And if we don't know we can have a moment confused and then we realize is dubbed (doesn't match - almost never). When we naturally use the reading lips help, sometimes even if the sound is BA but the mouth moves as FA you'll hear FA and that is the McGurk-Effect, and only happens in real life because, well... we can't say Psycodynamic without closing our lips at 2 points but with video editing we can.”

In this example, the user is trying to provide examples and evidence to exaplain why seeing the lips help us understand, and what is McGurk-Effect. This is categorized as C1.

Example 6:

“Hi everyone My daughter had a severe brain injury in 2000 and for a long time afterwards felt that she could no longer dream. However as she, in common with many others, had short term memory problems, it may be that she could simply not remember her dreams. What was unusual with her is that when she initially came to from the coma, she felt that she was in her own dream. She kept trying to wake herself by pinching her legs, pulling out her catheter and throwing herself from her wheelchair! By the way she made a complete recovery is now a vet and about to have her second baby. She does dream now, but not as often and not as vividly. “

In this example, the user is telling a story about personal experience, but it is considered as C1 because the user is using this as an example to make an argument that is related to course content—dreaming.

Fail Example 1:

"EMAIL19762 - In contrast I found Week 2 easier than Week 1, as the information was more structured. Not so much as how it was presented in the OLI, but more along "this connects to that, etc" which for my mind and learning style allowed for a quicker and more thorough understanding of the material as compared to Week 1, which seemed more direct memory work trying to remember the names of the scientists and their particular schools. Despite that I still scored a 9 in Week 1, and a 10 Week 2. Now I'm trying to catch up with Weeks 3 and 4, though I'm still on track to be able to complete the course for the certificate."

In this example, the user is trying to compare the structure of the materials in week 1 and week 2, and explained why he/she thought so. But we constrain constructive behavior to be course content-related (psychology-related in this case), if the post is reasoning about course structures, we don't think it's constructive.

Fail Example 2:

"Personally, I find it more palatable if the videos have deeper contents and the OLI is an optional reading or only a certain important areas not covered in the video lectures are made mandatory. GeoTech should take into account many who are taking MOOCs are full-time working adults yearning to learn new knowledge amidst busy work and family schedules. Such desires and interests should be encouraged and taken into account by the learning providers with a better and more flexible course structure such that it allows us to decide the depth of learning, as long as the basic learning objectives are met."

In this example, the user is also trying to make a comment on course structure and provides evidence to support it, it's not considered to be constructive either.

Constructive-propose an idea (C2)

Definition:
If the post doesn't contain any explanation or reasoning, but it proposes a new idea, asks a question or contains content that is related to the course but go beyond what's covered in the course materials, for example referring to relative external resources. The post will be categorized as C2.

Situations include:
The user proposes an idea, makes a judgment, makes a decision but doesn't explain why he does so.
The user asks a question based on his ideas/assumptions, which are not paraphrasing the course content.
The user provides links to external resources or connected the content to other resources he has seen or read, and explained how the external resource is connected to the content. Or if we can tell from the context of the post that the link shared is related to course content. It's also categorized as C2.

Example 1:

"Good to see scientific method highlighted in the first week. Not sure why the focus of this was research on house flies. Wouldn't an example from psychology be more interesting? I guess using scientific method to research questions of psychology may be more complex but that's why we are studying. What do you think?"

In this example, the user is trying to make an argument that using example from psychology would be more interesting, but didn't fully explain his/her idea. So it's categorized as C2.

Example 2:

Post: "Here is an interview with Dr. Gazzaniga and his split-brain patient Joe, https://www.youtube.com/watch?v=RFgtGIL7vEY Subjectively he feels as before the surgery."

Thread starter: "I mean: not sensory/cognitive functions but identity, consciousness, subjective feelings of "being"... there is one or two? :)"

In this example, the user is sharing external resources on course content, so it's categorized as C2.

Example 3:

Can someone please explain how the 34% was determined between both the first dev. above and first dev. below the mean? Also, is 15 always the standard deviation in a Bell Curve? If not, how is the standard deviation determined.

In this example, the user is asking questions that are relevant to course content.

Example 4:

Post:
I had the same... 5% then;you did not have a Jnd.

Thread Starter:
In the last "learn by doing" about JND for the first pair I had 5% JND and for the second there was a message that "you did not have a JND for this activity". I thought that the JND difference would be higher than the first one because the stimulus was stronger. Can anyone please tell me what does "you did not have a JND for this activity" mean? Thank you

Previous post:
I too got 5 percent and "you did not have a Jnd"; Seems to be a flaw in the system.

In this example, JND is a psychological term. And the student is making a judgment based on the result.

Fail Example 1:

href="https://class.coursera.org/psy-001/forum/thread?thread_id=1225" target="">Happy with assessments 2 scores;

Although it's also link sharing, it's not a link that is related to course content, so it can't be categorized as constructive.

Fail Example 2:

last "learn by doing" (the last one!)"In the list below, for each of the senses, pick the type of signal that goes along the nerve from the sensory receptor on the body to the brain" (action potential?)

Although it's also question asking, it's simply repeating course materials without generating any new ideas, so it's not categorized as constructive.

Active- Paraphrase, repeat, and resources mapping (A1)

Definition:
If the user is displaying engagement with course materials in the post by paraphrasing, repeating, or mapping resources, which shows the student is actively engaged in course materials, and referring to specific content of course materials, it will be categorized as A1.

Situations include:
The student selects or repeats what's already covered in the course material. This could be indicated by quotes.

The user paraphrases what's already covered in the material. This could be explicitly indicated by the user saying, "it's mentioned…" "The video said…" "The textbook mentioned that …" It can be stated in a declarative way or in a questioning way. When the user explicitly asks clarifying questions about the course material without any new comments or insights by paraphrasing course content, it's also considered in this category.

This also includes the student points to specific resources in the course, refers to specific content of course materials, or builds connections between different resources.

If the post mentions specific content of course materials or refers to specific content, it's categorized as A1. And the content they're referring to should be course content related, if they're referring to content about administrative issues, that'll be categorized as A2.

Example 1:

"Your question has been answered affirmatively by Mr Alex in this thread: "Link: https://class.coursera.org/psy-001/forum/thread?thread_id=1284#post-4330" "

In this example, the user pointed people to specific resources in the forum.

Example 2:

"The information on question 8 is in the OLI textbook, but it's incomplete, and/or the quiz question was not clear. Question six was covered in a lecture, but not in the textbook."

In this example, the user is mapping content in the quiz with resources in the textbook.

Example 3:
"'Sensorineural hearing loss is the most common form of permanent hearing loss and frequently occurs with age.'"

In this example, the user is repeating course material.

Example 4:

"Apologies if this should be or is somewhere else. Have noticed the odd typo and spelling misuse, thought it might be useful to have a thread containing any that we notice for easy correction in the next issue. I'm just going to start from where I am currently although I know there were a few before pg 82 line 2: To - should read – two.

In this example, the user pointed out a type in the textbook, which is considered as referring to specific content.

Fail Example 1:

I don't have peer assessments also in my page, I believe they will anunciate it when it turns available. Announcements from the instructor about the course will be sent via e-mail to all registered students and also will appear on the https://class.coursera.org/psy-001/class/index Announcments page. I also read a post about it but didn't understood, what I see there are Demo's.

In this example, the user is also pointing to a thread in the class, but it's about course announcements. So it won't be categorized as resource mapping, instead, it will be categorized as A2.

Fail Example 2:

In my opinion the book is wonderful. I could expect nothing better.
(It's my dozens course at Coursera so I think I can compare).

In this example, the user is generally mentioning his/her comments on the book, without referring to any specific content of the course. So it's categorized as A2.

Active- Imply attention to or engagement with course materials (A2)

Definition:
If the student shows evidence that he/she is being engaged with course materials, including watching videos, reading textbooks, taking notes, etc., without mentioning what the content is, it is categorized in this category. The student may explicitly and implicitly stating that he/she was watching a video, attempting at a quiz, but without paraphrasing or repeating the content in the material, otherwise it will be categorized as A1.

If the post doesn't have any substantial content, but it's in a conversation that is on-task, then we consider that it shows the student is paying attention to course content, and it's categorized as A2.

If the post shows that the student isn't currently engaged with course materials, but displays that the student is paying attention to course materials, and has an intention to get engaged, it's also categorized as A2.

Example 1:

"I got a 9/10 and I am really pleased with that! the question I got wrong is one I was questioning myself about but I just went with it, because going back to my notes wouldn't be fair. "

Example 2:

"I got 10/10, took me less than 10 min with twice check. The quiz is very easy in my opinion. I expected a lot more complicated."

Example 3:

I too cannot see the week 6 videos. I have no problem accessing all other videos and course material. It is vital that we can access week 6 videos as the material covered is quite complex. Please rectify this technical issue a.s.a.p;

Examples 1-3 show that the student is being engaged with course materials.

Example 4:

Good observation, Cor! :) I don't criticize this way of counting scores (unlike the situation with the assignments :D), it's up to the instructor. Just consider another nuance: after each quizz students have an unlimited number of attempts to practice, to learn their mistakes before taking the finals, and the last week material not only weights more but is evaluated just once. Again, I don't argue this time, just share my observations on the learning process.))

In this example, the student doesn't directly show that he/she is being engaged with course materials, but talking about scoring mechanisms shows that the student is paying attention to the course in general, and has an intention to get engaged.

Example 5:

Post:
Hi there Amy, For your reference, i think this had been addressed by Alex, to wit, Peer evaluations and course completion.

Thread Starter/Previous Post:
How does one grade an assignment that is at least half copied from sources, even if those sources are credited? (I'm not talking the use of ideas; I'm talking full on, copy-and-pasted paragraphs). Also, parts copied from sources that are not mentioned. There are some original sentences.

In this example, the student is involved in a conversation about assignment evaluation, showing that he/she is paying attention to the course in general.