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Taking Sides in Virtual Debates: Social Knowledge Construction in an Online Discussion

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THE ASSIGNMENT

- Students participate in weekly debates over social issues related to the course.
- Students choose a side to defend.
- They argue for their side using relevant course material and outside sources.
- Students respond to classmates to engage in asynchronous discussions during the week.

ASSIGNMENT TASKS

- Read both sides of the issue for the week from *Taking Sides: Clashing Views in Adolescence*[1] and any supplemental material.
- Take the YES or the NO position and in about 250 words argue for that side (using course material support the argument).
- In about 150 words, respond to a fellow student who took the opposing side.
- Post one more response (about 150 words) anywhere else.

RESEARCH QUESTIONS

- Is there evidence of social knowledge construction in these discussions?
- How does the debate format contribute to social knowledge construction?

CONTENT ANALYSIS & METHODS

- Coded using the Interaction Analysis Model (IAM), which separates knowledge construction into 5 phases (see Table 1).[2 3]
- The IAM was developed using grounded theory and analysis of online debates.[2 4]
- The unit of analysis is the individual post; each instance of students' cognitive activity is taken separately.
- Analysis of 71 posts from Week 2 of the course, debating: Do reality TV shows portray responsible messages about teen pregnancy?

Table 1. Phases of social knowledge construction in the Interaction Analysis Model[2]

Phase I Sharing and comparing of information	A. A statement of observation or opinion B. A statement of agreement from one or more participants C. Corroborating examples provided by one or more participants D. Asking and answering questions to clarify details of statements E. Definitions, description, or identification of a problem
Phase II The discovery and exploration of dissonance or inconsistency among ideas, concepts or statements	A. Identifying and stating areas of disagreement B. Asking and answering questions to clarify the source and extent of disagreement C. Restating the participant's position and possibly advancing arguments or considerations in its support by references to the participant's experience, literature, formal data collected, or proposal of relevant metaphor or analogy to illustrate point of view
Phase III Negotiation of meaning/ co-construction of knowledge	A. Negotiation or clarification of terms B. Negotiation of the relative weight to be assigned to types of arguments C. Identification of areas of agreement or overlap among conflicting concepts D. Proposal and negotiation of new statements embodying compromise, co-construction E. Proposal of integrating or accommodating metaphors or analogies
Phase IV Testing and modification of proposed synthesis or co-construction	A. Testing proposed synthesis against 'received fact' as shared by the participants and/or their culture B. Testing against existing cognitive schema C. Testing against personal experience D. Testing against formal data collected E. Testing against contradictory testimony in the literature
Phase V Agreement statement(s)/ application of newly constructed meaning	A. Summarization of agreement(s) B. Applications of new knowledge C. Metacognitive statements by participants illustrating their understanding that their knowledge or way of thinking (cognitive schema) have changed as a result of the conference interaction

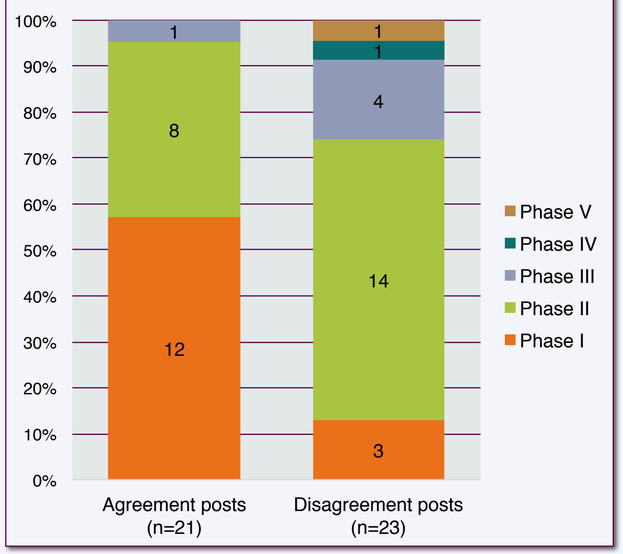
FINDINGS

- Most Level 1 posts reached Phase II in the IAM, few reached Phase III, and no Level 1 posts reached Phases IV and V (see Table 2).
- Level 2 posts are spread across more phases (see Table 2).
  - However, this depends on whether the post was an agreement response or a disagreement response (see Figure 1).
    - Agreement post: from someone on the same side of the debate.
    - Disagreement post: from someone on the opposite side of the debate (this was a requirement of the assignment).
- All Level 3 posts were of Phase III or higher, despite few posts at this level (see Table 2).

Table 2. Distribution of phase of social knowledge construction by level of post

	Level 1 Original post	**Level 2** Response to original post	**Level 3** Response to response post	Total
Phase I	7 *29.2%*	15 *34.1%*	0 *0.0%*	22 *31.0%*
Phase II	16 *66.7%*	22 *50.0%*	0 *0.0%*	38 *53.5%*
Phase III	1 *4.2%*	5 *11.4%*	2 *66.7%*	8 *11.3%*
Phase IV	0 *0.0%*	1 *2.3%*	1 *33.3%*	2 *2.8%*
Phase V	0 *0.0%*	1 *2.3%*	0 *0.0%*	1 *1.4%*
Total	24 *100.0%*	44 *100.0%*	3 *100.0%*	71 *100.0%*

Figure 1. Distribution of Level 2 posts by phase of social knowledge construction and type of post



RECOMMENDATIONS

1. Online discussions give all students a voice and allow them to back opinions with logic and facts.
2. Online debates requires students to confront opposing viewpoints and think carefully about how to respond and negotiate differences.
3. Require more, but shorter, discussion posts.
   - More posts should increase the development of social knowledge construction.
4. Require more high level posts in discussions.
   - Higher level posts reached higher phases of social knowledge construction.
5. Require more discussion posts in response to opposing views.
   - Social knowledge construction occurs when opposing views are confronted and negotiated.

REFERENCES

1. Serafini, T., Rye, B., & Drysdale, M. (2012). *Taking sides: Clashing views in adolescence* (3rd ed.). McGraw-Hill Education.
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3. Lucas, M., Gunawardena, C., & Moreira, A. (2014). Assessing social construction of knowledge online: A critique of the interaction analysis model. *Computers in Human Behavior*, *30*, 574-582.
4. Marra, R. M., Moore, J. L., & Klimczak, A. K. (2004). Content analysis of online discussion forums: A comparative analysis of protocols. *Educational Technology Research and Development*, *52*(2), 23-40.

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