

# Evaluating Online Dialogue on “Security” Using a Novel Instructional Design

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**Abstract:** This paper explores evaluation strategies to gauge the impact of a novel instructional design on international community participation online. This is done by conceptualizing and devising indicators for measuring “engagement” online amongst marginalized adult communities worldwide. In doing so, a review of online evaluation literature is conducted. In comparing dialogue sessions based on an ongoing traditional model to the new instructional approach, various challenges are faced in “measuring” asynchronous discussion. While the initial findings of marginal increase in engagement with the adapted instructional approach is not sufficient to prove that the new model works, this paper demonstrates various strategies/ challenges in evaluating dialectic engagement.

**Keywords:** online evaluation, instructional design, community participation, international, marginalized, engagement

## 1. Introduction

In the last two decades, the subject of computer-mediated collaborative environments has gained attention as more individuals across the globe seek to express themselves and understand each other through diverse online avenues. Much has been made about “virtual communities” that shape themselves along weak social network ties, celebrating these novel online engagements and connectedness (Rheingold, 1993). Of course these celebrations are countered with equally vehement derisions and cautions of loss of real time and face-to-face relationships, the (de)socializations of what is seen as a new virtual public (Lipnack & Stamps, 1997). Be it celebration, caution, derision or processes of “figuring out,” there is no doubt however that online social networks are here to stay and more importantly, expand in often unpredictable ways.

Much has been researched in areas of online identity in contestation to socially constructed stereotypes (Turkle, 1995; Wilber, 1997; Kendell, 1998; Kollock, 1999; Smith, 1992) as has the role of computer-mediated communications (CMC) in the complex interplay of text, talk and learning (Warschauer, 1997) and membership through social learning amongst communities online (Kim, 2000). As online communities get more competitive and formalized in their facilitation and mediation, strategies are sought to enhance the participant’s online experiences and engagements. There is much literature on strategies to moderate formal online distance learning (Levine & Sun, 2002; Discenza, Schenk & Howard, 2002; Assié-Lumumba, 2004), metacognitive or higher-order thinking strategies to enhance such learning (King, 1992; Schwartz, Bransford, & Sears, 2005) and the use of computers as a tool to advance these strategies (Scardamalia & Bereiter, 1991; Pea, 1994; Lin, Hmelo, Kinzer & Secules, 1999).

Further, evaluation of such strategies is now a pursued field as it is looked upon as essential to the understanding and proliferating of conducive behaviors, online and offline (Kendall, 1999; Leander & McKim, 2003). However, there is limited research conducted on strategies employed to facilitate asynchronous online dialogue forums amongst marginalized adults across socio-cultural and geographic environments. In particular, instructional strategies and evaluative frameworks to guide online dialogue amongst “disadvantaged” groups are few and far between. Therefore, this paper explores the potential of an instructional design strategy amongst such participants through demonstrated evaluative measures. Specifically, the scope of this paper is to gain some insight to the following questions through specific evaluation:

1. Is there a change in “engagement” with a change in the instructional design model online?
2. Does the new (CEBLE) instructional design model enhance “engagement” within an online dialogue setting?

This paper contains three sections. The first section surveys the understandings of online community participation and its evaluation strategies. The second section contains the details of the pilot project. This entails a description of the CEBLE model and the pilot setting, research goals, comparative results of the traditional to the applied CEBLE model and an analysis of findings. The third section concludes by stating challenges, inferences, and avenues for further research.

## 2. Understanding online community participation

One of the main challenges in the understanding of collaborative online discourse is in its transient nature. Nentwich (2004) states that to capture the good ideas that come up within a group, it is useful to have an archives feature. Also, in describing group dynamics, he states that online communities can serve as a portal for interactive interaction, information dissemination and exchange, capable of producing a synergistic relationship among the members of the group. Hine (2000) likens such interaction to a “flow” that achieves “relative spatiality across disparate resources” within social-material networks (p.76). The nature of the “flow” as Kendall (2004) professes is influenced more by asynchronous than synchronous factors, a form of communication that involves an interval between the sender and receiver of messages. This is corroborated by Moss and Shank’s (2002) findings on asynchronous discussions on Bulletin Board Systems (BBS). Based on their findings, they inferred that asynchronous discussion could produce higher participation & quality discussion as compared to synchronous discussion (p.24). Also, they found that participants collaborated with more equity using BBS. Kendall (2004) warns us though that in evaluating socially disparate sub-cultural group participants, we should not presume that all online interaction occurs within the same homogenous cultural context separate from the different cultures of the participants who contribute to it. Furthermore, in making inferences from online data studies, Sudweeks and Simoff (1999) state that perhaps the biggest issue with CMC field research is in the near impossibility of replicating its studies. This daunting task, they remark, is currently being researched more thoroughly for furthering the validity of online evaluations.

### 2.1 Evaluating online participation

There is a common understanding now that online and offline activities and spaces cannot be divorced in the study of virtual community participation. However, how to go about evaluating such activities continues to pose as a formidable challenge. Kendall (1999) exemplifies some of the dominant challenges through her three-year experiences with *Bluesky*, a text only online forum. To measure interaction within this forum, she chose an eclectic range of methods: face-to-face interviews, participant observation online, participation in face-to-face gatherings, and reading of related newsgroups and email lists. In her analysis, she concludes that while it is understood that online interaction cannot be divorced from social and political offline contexts, the feasibility and expense issue in researching both domains is often insurmountable. She also warns us to not assume that there is a natural congruence between the offline-online worlds. In other words, we cannot look at online activities as extensions of offline activities, events and social and cultural norms and values.

This thinking is echoed by Leander and McKim (2003) wherein the investigation of real-virtual spaces is rooted in the understanding of “the processes by which social spaces are held apart and blended, and how boundaries and blends are recognized in everyday practice” (p. 235). They envision though that over time, online communities will become more natural and familiar, blurring further the lines between these binaries. All the more reason to view the “place” for research online differently states Spradley (1980). Unlike offline traditional data collection at a “place,” he asks the readers to view online “place” instead as a “social situation” (p.19). The other two aspects that compose a sense of place in an online setting, he claims are its actors and activities where its physicality can be marked as a “basis for a social situation as long as the other two elements are also present” (p.19).

When it comes to examining the role of actors in computer-mediated communications (CMC), there is a special emphasis on the role of the researcher. This is a critical issue for many researchers when adapting the traditional ethnographic approach of participant observation to an online setting. For example, Kendall (2004) recommends participant observations for online interactive forums to prevent avoidance of important social contexts of online communication and interactions. However, such participation comes with its own challenges. Leander and McKim (2003) remarks on the researchers’ double bind, wherein when a researcher “observes” online, she is perceived by participants as a “lurker,” one who reads but does not post online (p.216). This is often looked upon negatively by the participants. Yet, if the researcher does not lurk but instead joins the online discussion, the problem shifts from lack of interaction to that of authenticity.

On the other hand, Moss and Shank (2002) champion the role of the researcher as also that of a participant, stating that researchers from the “outside” cannot do justice to the understanding of data. The authors attribute the close readings of the data in their study to the fact that they were from the same learning communities. They express less concern on the issue of “objectivity” as they claim that they allowed the participants to speak for themselves.

### 3. Online pilot project on topic of “security”

#### 3.1 The CEBLE model

The Critical Event-Based Learning Environment (CEBLE) was chosen for this pilot project as it is designed to help community facilitators think “past the application of their schematic responses” in response to recurrent problems as well as to capitalize on the multiple and unique perspectives of its participants (Lin, Schwartz & Hatano, 2005, p. 251). Originally designed for teachers, this model provides all participants the

*...opportunities to interact with people of different backgrounds, values, and goals through its multiple perspectives, and through sharing thoughts with other members of the communities. These social interactions allow teachers to gain the first-hand experience that the same problem can have many different solutions depending on the goals and values people bring with them. (p.251)*

The CEBLE shell evolved from a STAR Legacy software shell. The shell includes: (a) Meet the event (b) Generate responses to questions (c) Listen to multiple perspectives offered by people of different backgrounds, goals, and values (d) Act on the perspectives by generating solutions for selected perspectives (e) Reflect on the effectiveness of one’s solutions and share their choices of perspectives, solutions and legacies with other members in the community who explore a similar event and topic (p.251).

This metacognitive thinking in the CEBLE model has been defined as “the awareness and regulation of the process of one’s thinking” and has been recognized as a critical ingredient to successful learning, online and offline (Lin, Schwartz & Hatano, 2005, p.4). In fact, this model promises potential within an online community environment given the popular belief that computer-mediated learning communities are based largely in situated cognition theory characterized by active engagement, discovery learning and co-construction of knowledge in communities of practice (Kirshner & Whitson, 1998; Lave & Wenger, 1991; Wenger, 1998). In particular, asynchronous communication is now commonly viewed as an effective tool for participant reflection and critical thinking (Luppicini, 2002). That said, this paper investigates this potential by applying this model to an online dialogue forum with participants from highly diverse, disadvantaged environments.

##### 3.1.1 Project goals

This online pilot project was founded by an international non-profit in New York that uses dialogue for creating peace and understanding across boundaries. For the last fifteen years, they have facilitated dialogue within various settings and among diverse audiences. In the last year, they embraced the online medium as they sought to open this dialogue across international environments, particularly amongst actors that were marginalized socially, economically, politically and otherwise. The goals of this dialogue as professed and made explicit to the participants by the non-profit were mainly three fold:

- To generate a deeper understanding of the topic on “Security: How can we all have it?” amongst international participants
- To foster participation from a range of different cultures to broaden perspectives
- To apply cross-cultural awareness to critical problems participants face in their own communities to generate novel solutions to chronic problems related to security.

The research goals however, for the scope of this paper is to gain insight to the following:

1. Is there a change in “engagement” with a change in the instructional design model online?
2. Does the CEBLE instructional design model enhance “engagement” within an online dialogue setting?

##### 3.1.2 Methodology

Particular themes were drawn out and categorized from the discussion dataset. This heuristic coding (Jensen, 2002) produced a working document of elements and occurrences in the dataset. This analysis embraces the initial stages of the computer-mediated discourse analysis (CMDA) interpretive approach described by Herring (2004) starting with some of the situational and technological variables of the pilot project. Some of the situational variables entail the participant structure (number of participants), participant characteristics (background, motivation, experience, demographic etc), setting, purpose, topic, tone, linguistic code; some of the technological variables are synchronicity, anonymity, and channels of communication to name a few.

Also applied was the “manifest content coding reproduction” conceptual framework of Luppicini (2002) to determine the indicators of “engagement” online. In determining characteristics of this dialectic engagement, linkages were made to the goals of the non-profit for online dialogue: exposure to other perspectives and a deeper understanding of the topic “security” for generating ideas and solutions. In doing so, the following coding set was looked at as an aggregate of factors that constituted “engagement.” Some key codes are as follows:

1. 1) Number of postings: The assumption is that the higher the number of postings, the more participation in the forum.
2. 2) Participants referencing their own personal experiences: Dahlberg’s (2004) “inherent characteristics” of CMC was used, particularly the personalization/ depersonalization or intimacy as a determinant to measure engagement. The assumption here is that the personalization of a posting is indicative of “trust” and relationship building on the forum.
3. 3) Participants referencing the topic: Here, if participants are not addressing the topic and are going off on a tangent, it can be perceived as disruptive and disengaging within the “flow” (Hine, 2000) of the dialogue. Hence, each posting that addresses the topic would be considered as that contributing to higher engagement.
4. 4) Participants referencing each other: This is looked at as synonymous to “listening” within an online setting. The assumption here is that when a participant quotes or “refers” to a posting by another participant, it implies that they are reading the postings and building on it to further dialectic engagement.
5. 5) Participants furthering dialogue: This category is intended to incorporate the aspect of higher-order thinking that is a sign of high engagement. When a participant posts a comment that is not regurgitating past dialogue but taking the past dialogue to a new and different level, it is considered an aspect that increases dialectic engagement. This is measured by looking at the prior postings and seeing if the posting at hand “adds” to the subject of security. Participants asking questions that compel participants to respond with new insights is also considered to have furthered the dialogue.

Hence, each posting got a point for catering to each of these categories. The dataset was clumped into seven sessions, six that were traditional and the seventh that was the CEBLE model. Within each session, “engagement” was measured based on this coding structure and compared to one another and the CEBLE session to help determine whether there had been any change in dialectic engagement using the CEBLE model. In the CEBLE online model, the action research method was adopted to strengthen the validity of the study (Moss and Shank, 2002) wherein the author was on the “inside” of this online learning community playing the dual role of a facilitator and participant. However, the authors’ postings were not counted.

### *3.1.3 Participants*

This organization employed the iEARN platform, the largest international education resource network<sup>1</sup> to facilitate an online dialogue on “security”. In order to participate, each person had to be registered with iEARN. Most participants were recruited primarily through outreach activities on iEARN and idealist.org website, another popular non-profit Web Site. All participants had some access to computers and the internet as well as English proficiency skills. As we can see in Table1, there were ten participants and one facilitator. The ratio of men to women on the forum is not overly skewed (4: 6). The participants are mainly social workers engaged in the field of migration, children and human rights, HIV/AIDS, drug prevention and the like. As we can see in Table 1, most have chosen to work in environments that are isolated, disadvantaged and marginalized in one form or another.

The topic of “security” for this online forum was decided by the non-profit organization particularly in response to the 9/11 event. At the start, each participant introduced him/herself to all members of the organization. They were specifically asked to share with the group their reason/ motivation for participating in the dialogue. About half of the participants expressed overt interest in understanding people from international and diverse backgrounds. Furthermore, while two members (participant 2 & 3) expressed interest and motivation in attaining “peace” through dialogue, five of the members alluded to the subject of “rights” in addressing security issues. For example, participant # 4 from the Philippines wrote, “I am interested with this international conversation about security because my six years in working with children in

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<sup>1</sup> Started in 1988, iEARN is the world's largest non-profit global network that enables teachers and young people to use the Internet and other new technologies to collaborate on projects that are aimed to enhance learning. See <http://www.earn.org/> for more details.

extremely difficult situation in the Philippines, I realized the value of security issues specially in empowering the rights holders in claiming their rights" (Table 1).

**Table 1:** Background and initial motivation of participants of online pilot project

Participants	Country	Gender	Affiliated field	Stated reason for participation: QUOTES from Forum
1	NY, USA	F	Social work: Church Social Work	"...after the US was attacked on 9/11/01 and this powerful country began focusing on its security...all of us in the world have security issues and security rights and we might grow to understand one another better in a conversation on this topic."
2	NY, USA	F	volunteer: Retired	"I want to explore what kind of societies we need to create in order to have peace."
3	Zambia	M	Social work: HIV/AIDS	"I believe that all the wars and rumours of war that we have see and heard respectively are as a result of failure by people to come to a round table and amicably discuss and resolve differences...Getting views from different backgrounds may in its own way add something to the search for global peace which to me is not beyond reach." "I am interested with this international conversation about security because my six years in working with children in extremely difficult situation in the Philippines, I realized the value of security issues specially in empowering the rights holders in claiming their rights."
4	Philippines	F	Social work: Child labor	"Security is an important aspect in our lives and the more we can debate the various issues relating to it the better we can find answers."
5	Zimbabwe/South African	F	Social Work	"We feel like it our duty to make sure that everyone in our own community know that they have the right to feel secure while it is our responsibility promote security within our own communities and to hold our governments responsible as well."
6	LA, USA	F	Shelters	Cultural studies interest
7	Turkey	M	Student	"...working with victims of abuse and detention is pushing my motivation even harder"
8	Zurich, Switzerland	M	Social work: Child Abuse	"...our long range goal is to have a nation-wide organization of older people (mostly poor, mostly women) who will ensure real security."
9	Philippines	M	Social work: Elderly Care	"I am happy to learn about the experiences and lives of people living so differently from me."
10	NY, USA	F	Social work: Drug prevention	
	NY USA/Caucasian	F	Traditional model/Masters student	
	NY, USA/Indian	F	CEBLE model facilitator/ Doctoral student	I am doing my doctoral studies in technology, literacy and language and I want to understand what makes for effective and meaningful dialogue online.

### 3.1.4 Application of the CEBLE model

In terms of sessions, there were a total of seven sessions in the online forum: six using the "traditional" instructional model and one using the CEBLE instructional model (see Table 2). The instructional model in the past six sessions is termed here as the "traditional" model for comparative sake only. The impetus to use a new model by the non-profit was based on the intent to increase the quantity and quality of postings in the online forum. To address this challenge, the CEBLE model was applied to the seventh session of the forum. Given that the online forum was a dynamic international and cross-cultural environment with a goal for critical thinking on the issue of security, it was hypothesized that the CEBLE model may be appropriate to foster dialogue, particularly by generating questions and facilitating discussion grounded within the context of past participant dialogue and exposure to new viewpoints for higher engagement (see Table 2). As we can see below, the instructional strategies between the two models to create an engaging online dialogue were different.

**Table 2:** Comparing the traditional and online CEBLE model

STEPS	Traditional model (n = 10)	Online CEBLE model (n = 10)
At the beginning (Meet the Event)	A question is posed mostly independent of references to past dialogue	A question is situated in past dialogue
External experts' view (Multiple perspectives)	Not offered	Offered in the middle of the discussion as a contradictory viewpoint to participant posting.
Facilitation: facilitator's role (Generate ideas and responses)	Posts questions / Affirms responses	Posts questions / Affirms responses/ Provides alternate viewpoints/dual role of participant

As we can see in Table 2, to initiate discussion in the traditional model, the facilitator posed a question to the participants as a separate discussion link for each of the six sessions. This question was posted as an independent entity without referencing past participant dialogue. When participants responded to the question, the facilitator primarily affirmed the participants' responses. On the other hand, in the CEBLE model, the question was rooted in past dialogue to determine trends of consensus and dissent. The question was then built around this critical synthesis to further the understanding on security (see Abstract 1)

**Abstract 1:** Meet the event: Initiation of dialogue through question in the traditional and CEBLE model

██████████ - 12:45pm Sept 19, 2005 EDT

What are the biggest obstacles to security in your locality?

██████████ - 03:47pm Nov 1, 2005 EDT

Hi everyone,

At this stage in our dialogue on security, it seems that there is an underlying dilemma on the power of the individual in creating security. From my understanding, ██████████ seems more biased on individuals having more power and control over their personal security. She parallels safety to security –referring to "wellbeing without fear" and states that participation and intervention is almost negligible as we reach the national or/and international level. Interestingly, █ refers to security as that which needs to be built, where "security can be gained not so much from physical or armed strength but on mutual respect." Here, I would interpret this as security that is communal in nature. In █'s theory of "loving conflict," an interesting thought has surfaced where the oppressed seems to have more power than the oppressors. In the same vein, ██████████ suggests that dialogue is the best tool to sort out conflict than any other means of force while ██████████ shares his view on conflict which is not necessarily negative as long as we know how to negotiate with it.

So it seems to me that we all seem to agree at this stage that security has multiple hues and is layered as individual, communal, social, economic, national, international and so on. We also seem to see a relationship between conflict and security that is not necessarily diametrically opposite to one another. However, I sense that as we speak about security, we have not made our beliefs explicit on how we negotiate with power to achieve security for ourselves and others. So my question is as follows:

In what way have you exercised your power to achieve security for yourself/ others?  
Looking forward to hearing your views on this.

The other distinguishing aspect between the two models is in the strategic posting of an outside and provocative perspective through the CEBLE model (Table 2). This feature was absent in the traditional model. This aspect was incorporated to supply a contradictory and perhaps unfamiliar viewpoint to the participants to make them reevaluate their perspectives and engage at a higher metacognitive level. As we can see in Abstract 2, there is back and forth dialogue between the participant and the facilitator. Prior to this, there was a general consensus amongst the participants on the idea that migration produced insecurity as exemplified in the first posting in Abstract 2. The outside (expert) perspective (Second posting: Abstract 2) introduced by the facilitator was deliberately chosen to contradict this perception. The posting was on the "urban tribes" theory proposed by Ethan Wattars stating that migration can cause a reverse effect, where the need for security amongst the displaced populace can create tighter communities.

**Abstract 2: Sampling of CEBLE dialogue before and after outside perspective is introduced**

██████████ Nov 17, 2005 6:50 am (5.)  
(IP: 128.59.103.138)

[Bookmark](#) | [Email to Friend](#) | [Edit](#) | [Delete](#) | [Reply](#) | [Move](#)

Dear ██████████

Your own personal story about "security" could be repeated millions of times by Filipinos. No country in the world, percentage wise has as many people seeking economic security abroad. Yesterdays broadsheet had it that for the first ten months of this year, 800,000 filipinos have gone abroad seeking employment (the official figure) which means a million people--mostly young this year. Altogether, maybe 10 million or 15% of the population at any given time (this does not include the illegals who are also estimated to be large!) We have a close friend who spent 13 years in Saudi as a driver. The good part: his four children are all college educated. The bad part: they grew up without a father and hardly know him. Its a trade-off many have to make. This does not include all the rackets, exploitation and sex trade to which a number, in their desperation, have fallen into. Now that's insecurity!

peace  
██████████

██████████ Nov 19, 2005 2:07 pm (6.)

[Bookmark](#) | [Email to Friend](#) | [Edit](#) | [Delete](#) | [Reply](#) | [Move](#)

Dear ██████████

... I wonder if immigration can have a reverse effect?... Interestingly, I came across a book called "Urban Tribes" by Ethan Watters that talks of the urban jungle of cities. He speaks of the proactiveness of isolated people in reviving the tribal ways of strong expectations from their friendships, and sharing and caring for eachother much like a traditional tribe...

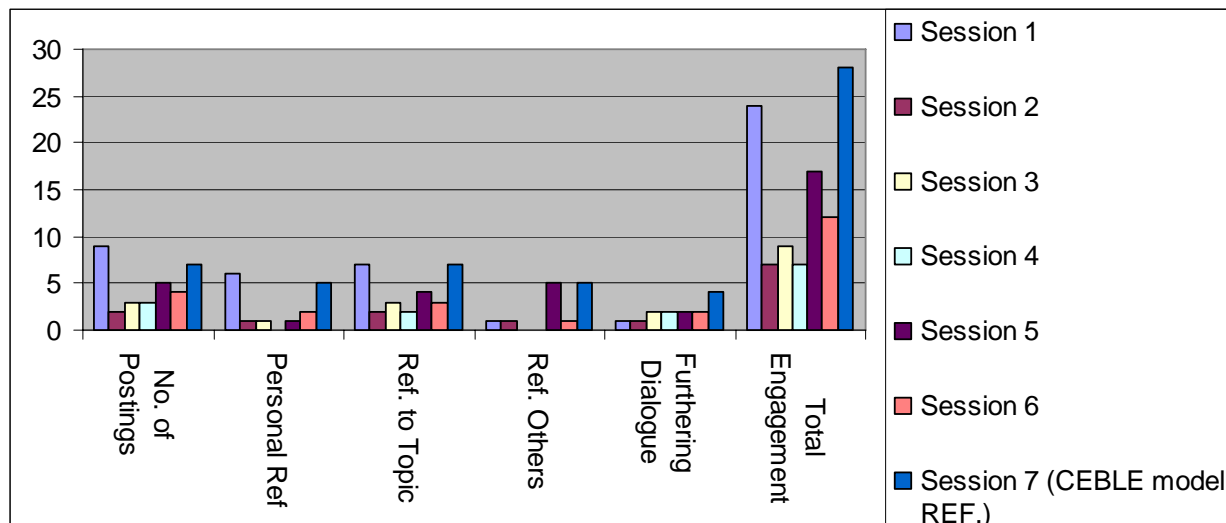
██████████ - Nov 21, 2005 5:05 pm (7.)

[Bookmark](#) | [Email to Friend](#) | [Edit](#) | [Delete](#) | [Reply](#) | [Move](#)

Dear ██████████

I was at a book launching the other day..a book about disabled people who had formed themselves into cooperatives and had metamorphosed from begging in the streets to manufacturing chairs for elementary schools. At the launching a good friend spoke saying, "we are all disabled in one way or another and you have taught us how to deal with our own disability"..change disability to insecurity and the same truth may apply. In other words, its not two questions but only one...my security and everyone elses are interdependent...and my security will depend on my engagement in everyone elses...

**3.1.5 Results from the CEBLE application:**



**Figure 1: Comparison of traditional model and CEBLE model: Indicators for engagement**

As we can see in Figure 1 above, there is some change with the change in the instructional design model. If we were to discount session 1 when comparing the indicators, the CEBLE session can be seen as showing positive results over the traditional sessions (Session 1 to Session 6). Also, the postings in the CEBLE session marginally increased over all sessions but for session 1. However, the difference appears less significant. While there is a total of seven postings in the CEBLE session, this was still less than the total number of participants (n =10). On the other hand, there seemed to be more significant changes in the content of postings in the CEBLE session. For example, while most participants referred to the topic across

sessions, be it the CEBLE or traditional sessions, there had been a substantive increase in the personalization aspect within the CEBLE model. In other words, participants appeared to draw much more from their own experiences when responding within the CEBLE model. They seemed to share perspectives from their own contextual environment when explaining their point of view.

The only other session that competed on this personalization aspect is session 1. In fact, as we can see in Figure 1, there are a number of similarities between session 1 of the traditional model and session 7 from the CEBLE model. They both had high number of postings, high referencing to the topic and more importantly, they both scored high on the personal reference category. Six of the nine participants in session 1 weaved in their own experiences when responding to the question. In the CEBLE model, five of the seven participants did the same. Also, few participants in session 1 referred to one another or furthered the topic with questions or insights on the topic of security. In terms of furthering the dialogue, there was a gradual increase in participants demonstrating critical comments or questions that “furthered” the concept of security. Given that this is a harder category to make explicit, here is a sample of what constituted as “furthering the discussion.”

██████████ Oct 14, 2005 9:14 am (3.)

*You cant have security because you want security. You have to think, what makes for security? (your question) because it is consequent or contingent on something else. Some people seem to think it's strength—gotta show you're strong."the best defense is a good offence" but security is built not so much on physical or armed strength but on mutual respect—a kind of strength in itself. In our case, it means going door to door and spending months talking to people until we are accepted and can get everyone to sit down together and talk about what they would like to do together—as a community (do you want better health care—are you willing to be trained as community health workers? Etc.) now, we can talk about security—not because we set out to get more security but because we share something of the same values, the same dreams...now we are secure because we are in this together...*

And here's a sample of what did not constitute as furthering the discussion...

*I am under stress with a new job which involves a lot of travel. I will respond on later for a while. And I wanted to say that ██████████ in Portugal has results of a discussion, but has been having some difficulty getting it translated to English.*

However, if we were to *not* discount Session 1, the results are less definitive. Overall, to answer the research questions on whether there were any changes whatsoever in the change in instructional design as well as to see if the CEBLE model enhanced engagement, results can be found to be affirmative on both accounts *only if accounting for Session 1*. This in itself is not sufficient to profess that CEBLE does in fact increase engagement as there are some confounding factors as we see in the analysis section below besides the more obvious small sample size that deters generalization. The purpose of this paper though lies in explicating the evaluation strategies and challenges involved in online dialogue measurement as well as gauging the *potential* of the CEBLE model for engagement.

### 3.1.6 Analysis of findings

The reason we can consider discounting Session 1 is due to it being the first session where participants have to address the topic as they are explicitly asked to do so by the facilitator. This can explain the high number of postings, personal references and reference to the topic. To the extent that in session 1, the discussion was at its initial stage where the participants were getting to “know” one another and was starting to “build a relationship” with the group, it can be seen as an anomaly. Further, as is commonly experienced in voluntary participation, there is generally an enthusiasm at the start of an endeavor. The challenge for most online discussion boards is in sustaining and enhancing participation through engagement and not just the recruitment of the participants.

Also, if we take a look at the questions in session 1, the reason for the personalization aspect becomes more evident. The question being: “When you were growing up, what did you learn about how to resolve arguments or other conflicts? What do you think now?” This was deliberately structured to evoke personalized responses. In contrast, the question for the CEBLE session (Abstract 1) was framed as a synthesis of participant's past comments to further the dialogue to new insights. With that logic in mind however, the tables can be reversed. In effect, the CEBEL session personalization can also be seen as “understandable” because the question in that session was posed to maximize that aspect. Of course, this brings into question whether or not its' the CEBEL model that is causing the result, or simply the type of question.



That said, even if we *do* discount Session 1, the increase in the postings seems unimpressive and cautions against clear declarations on engagement levels. While this in itself is worth pointing to, what is of more importance here is that this category fails to include “lurkers” which is critical to the understanding of engagement. In theory, a participant could never post a comment online and yet be highly “engaged” by reading all the postings and reflecting upon it in their offline lives. The usage of log files of the online forum was considered to determine whether participants were viewing the comments. However, it was discovered that users do not necessarily have to visit the forum in order to actively participate in the topic. This is because every posting on the forum gets automatically sent as an email notification to the participants email account. Thereby, the most active participant theoretically could never have logged into the forum. Since many users had this option enabled, the log files would have been an unreliable measure of participation. Thereby, we have an unresolved confound between participant postings and engagement.

Also, while having created categories or codes as a composite of “engagement,” it is questionable whether all codes are of equal weight in the gauging of engagement. Further, in relation to CEBLE’s multiple perspectives, it is worth asking whether simple disagreement automatically constitutes as a multiple perspective and whether multiple perspectives could in fact equate to engagement by itself. As to the researcher being the facilitator, there is always the research bias looming over the study that takes away from the results to a certain extent. At best, a compelling case can be made that CEBEL came out with some potential in generating personalized engagement.

#### 4. Conclusion

This study was particularly fortunate to have the same number of participants across all sessions. This fostered stronger validity within the pilot project. Being asynchronous and by invite only, this online pilot study was able to circumvent some of the challenges that incur within most synchronous settings such as participant anonymity, changing online demographics within the time of the study, etc. Also, the controlled setting with separate discussion threads and archives for each session enabled the sorting of data.

That said, given the marginal increase in the number of postings in the CEBLE model, the issue of increasing the quantity of postings still persists. Part of this is because of the small sample size. The log files dilemma as explicated in the reading of the postings remains unresolved. Other variables that could be influencing this data also need to be investigated. Given that the adult group specifically chosen by the non-profit represents an international demographic situated within marginalized environments, variables pertaining to access to technology and other related issues of access and usage need to be considered. Unique socio-cultural, economic and geographic factors such as lack of mobility to cybercafés, electricity, individual routine, political and social stability and the like could be impacting the amount and quality of postings by the participants. This reinforces the inseparable nature between offline and online lives.

Also, while attempting to execute a fair comparison between the two models, the discrepancy of session length is evident. While the traditional model went on for approximately six months, the CEBLE model was executed for a period of one month only. Hence, a more longitudinal approach is needed to gauge impact. While the number of postings is not significant, the observed difference between the nature of postings between the two models is encouraging. Based on these preliminary findings, there seems to be some support for the CEBLE model as a potential engagement tool in instructional design within online dialogue.

For future studies, it would also be useful to know what aspects of the CEBLE model are most effective in online dialogue. To conclude, it is important to remember that in evaluating socially disparate sub-cultural group participants, we should not presume that all online interaction occurs within the same homogenous cultural context separate from the different cultures of the participants who contribute to it and that “engagement” means different things to different individuals from different socio-cultural backgrounds.

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