Talk through the Hand: Using Audience Response Keypads to Augment the Facilitation of Small Group Dialogue

DAVID CAMPT* MATTHEW FREEMAN†

Abstract

Audience response systems (ARS) offer significant advantages to dialogue facilitators of small to medium size groups. These devices, which are gaining increasing use within K-17 classrooms, allow dialogue focused meetings to become more engaging, inclusive, and democratic. Dialogue facilitators can use this capability in different ways at various phases of the flow of a dialogue process. By instantly displaying a graphical display of individuals' responses to multiple-choice questions, participants become aware of the diversity of opinions, experiences, and perspectives in the room. The displayed results create a shared and somewhat objective picture of the diversity of the group mind that is less subject to interpretation than a summary created by a participant or facilitator. This accelerates productively the purpose of group dialogue, which is grappling with the causes and implications of the internal diversity in the perspectives of the participants. ARS allow each person to know their opinion counts equally and productively shift the attention of every participant to the group's collective mind.

Keywords: dialogue, facilitation, keypads, clickers, audience polling, audience polling systems, audience response systems, interactive voting

Copyright © 2009 The International Association for Public Participation. All rights reserved.

^{*} The DWC Group, the racedoctor@yahoo.com

[†] The DWC Group, freeman.matthew.g@gmail.com

Section I. Introduction and Overview

nvented during the 1960s, audience response systems (ARS) are combinations of handheld keypads, computers, and projection devices that allow a facilitator to ask a group of people a multiple-choice question and to receive a graphical display of the summary of individual responses. Modern devices are wireless, portable, and interface with Microsoft Office software, PowerPoint and Word, making the systems easy to use.

The application of ARS in settings with small to medium size groups (6-40 people) has not been well considered. Many facilitators have personally expressed to the authors a high degree of skepticism about whether ARS would be additive to these settings of dialogue; many have articulated strong concern that such "high-tech" impersonal devices would detract from the "high-touch" settings of small group dialogue. This article is an attempt by the authors to answer these questions. While ARS, like any tool, can be misused, it is our contention that *if employed skillfully*, ARS offer facilitators of dialogues for small to medium size groups a number of significant advantages.

This article proceeds as follows. First, we briefly define the dialogues that are the focus of our professional work, dialogues focused on fostering transformation, creating understanding, and exploring consensus. In Section II, we review the literature about such dialogues as well as visit the literature about the use of electronic keypads with groups. In Section III, we review some highlights of the authors' previously published thoughts on how dialogues affect participants, as well as the underlying meta-structure of dialogues to produce those effects. This section also includes an overview of different types of keypad questions. Section IV, the core of the article, reviews how different types of ARS questions can be helpful to facilitators at various points in the dialogue process. In Section V, we briefly present some additional benefits of keypads for facilitators, as well as some suggestions about how facilitators might create receptivity for the keypads among their groups. In our conclusion, we highlight some questions

¹ Such devices are reasonably well known for their contributions to large-scale meetings (more than 300 people), including public deliberation focused meetings like those convened by AmericaSpeaks and other organizations. In such settings, the program flow typically oscillates between a few different modalities: small group dialogue sessions, reviews of key facts or concepts, full group sessions featuring facilitator comments, keypad polling, samples of participant comments, and perhaps other activities. For these settings, there is widespread recognition – along with some remaining professional disagreement – about the value of ARS and the way it allows facilitators and participants to probe the perspective of the entire gathering.

that scholars and practitioners of group process might consider for the capacities and limitations of ARS within dialogue groups.

Terms and context

A note on verbiage in this article: as noted above, an audience response system (or ARS) is a term used to describe the entire systems of handheld devices, receivers, computers, and projection. In describing keypad-assisted facilitation, we will also use the term "keypads" to describe the devices participants use.²

Section II. Literature Review

The most relevant literature for this discussion falls in three categories: writings about ARS in-group settings, discussions of the purposes of dialogue, and texts analyzing the sequence of steps within a dialogue. We will visit each of these topics in turn.

ARS in Group Settings

An exhaustive literature search revealed the extensive literature on ARS focuses almost exclusively on their use in educational settings. The search produced no significant articles on use in dialogue or civic engagement settings. Articles focusing on the use of keypads in education focus on testing student apprehension of facts and concepts (Medina, Medina, Wanzer, Wilson, Er and Britton, 2008) but there have been studies demonstrating changes in student learning behavior that illuminate their usefulness in dialogical settings. First, students report an increased interest in and attention to what transpires in the classroom when keypads are used, which helps ensure all students' voices are heard (Mayer et. al., 2009).

Second, keypads make students' thinking more visible to one another, which, when combined with small group discussion, increases their ability to reason to correct answers.

² We are most familiar with devices from Turning Technologies, and our experience with this company's product is reflected throughout this article. We do not intend to endorse Turning Technologies as the sole or best option available. Other companies have usable products. In addition, it is important to note the capabilities audience response systems are ever evolving. When this article was first conceptualized, it was not possible to use the Apple iPhone as a keypad device the ARS system we use; by the time the article was submitted, the authors had used this capacity in a live presentation. Similar advances in capacities beyond what is discussed here may exist by article publication.

Evidence suggests "these increases result primarily from student gains in conceptual understanding rather than simply from peer influence" (Smith et. al., 2009).³

The function of the keypads in this scenario is to invite people into a space of self-reflection and analysis of a question, then to create a space for people to reason together, and finally revoting to assess any collective change in understanding. In dialogic settings, the analogous process involves asking a keypad question to invite self-reflection on a topic. Results from the room demonstrate the variety of perceptions, and space for discussion allows for "social learning" where dialogue participants can reason together and begin to broaden their understanding of the issues at hand (Smith et. al., 2009).

Dialogue and Its Purposes

Literature on dialogue wrestles with two different understandings of dialogue's main purpose—a focus on relational and personal change or a focus on external structural change. The seminal work by David Bohm *On Dialogue*, typifies the first approach.⁴ Bohm (1996) positions the power of dialogue in the encounter with another's thoughts and assumptions, which leads to greater understanding between participants ("collective consciousness") and transformed social relationships (pp. 26-7, 38).⁵ Others, including "Future Search" creator Marvin Weisbord, focus on dialogue's ability to transform structures through helping diverse participants discover common purpose.⁶ Patricia Wilson has reviewed many authors and organizations promoting dialogue and identified efforts that emphasize personal change, efforts that emphasize structural change, and those which attempt to blend the two.⁷ The approach to dialogue we assume in this

³ Smith (2009) has found that asking a keypad question, displaying the results, engaging students in small group discussion, then asking the same question again (or a question on a similar concept) increases the number of correct answers. Increased correct answers remained true even in situations where no one in a small group discussion had the answer correct the first time.

⁴ "And perhaps in dialogue, when we have this very high energy of coherence [developed between participants], it might bring us beyond just being a group that could solve social problems. Possibly, it could make a new change in the individual and a change in the relation to the cosmic. Such energy has been called 'communion.'" (Bohm, 1996. p 47).

⁵ Thinkers in this camp do not oppose action, and indeed advocate vigorously for the need for social change. *Cf.* "Perhaps, it might be suggested that this aspect of a Dialogue-Spirituality is the foundation for the true renewal of our institutions since true renewal requires changing the underpinning relationships." (Martin, 2005. p. 99).

⁶"[W]hen groups share a common purpose or ideals about a more desirable future, they can learn to work together, respect each other, and cooperate toward the achievement of shared goals" (Emery & Purser, *The Search Conference: A Powerful Method for Planning Organizational Change and Community Action.* Jossey-Bass Publishers, San Francisco.1996 as quoted in Norum, 2005, p. 324)

⁷ Wilson identifies four types of civic engagement that use tools of dialogue: deliberation, dialogue, collaborative action, and community conflict resolution (Wilson, 2004, p. 3).

article is characterized by Wilson as "collaborative action," which uses "dialogue, inquiry, and deliberation to inspire participants, build working relationships, and make decisions about collaborative actions they will take to improve their communities" (Wilson, 2004, p. 4). The transformation of individuals and relationships is the building block for finding common ground for action.

What Happens within Dialogues

A similar approach to Wilson is taken by Harold Saunders' "Sustained Dialogue" method, which proposes that a community crisis requiring collective action can be the catalyst for transformed relationships. 8 "Relationships change when groups discover they need each other" (Saunders, 2001, p. 254).

Saunders and a few other authors break down the dialogue process into steps that help diverse participants connect, explore issues from various perspectives, and begin planning action steps. In an edited volume, a process called The "Focused Conversation Method" identifies four steps: objective questions, reflective questions, interpretive questions, and decisional questions (Stanfield, pp. 22-29). Moving through these phases allows participants to shift from "individual reflection...to shared insight" (Stanfield, p. 25) while accounting for participant differences in experience, perception, and emotional relationship to the issue. These differences, when expressed in a safe space created by the process, enhance the final action planning steps rather fostering division.

Schirch and Campt have a largely similar analysis of dialogues focused on relationship building and action (Schirch & Campt, 2007). This short treatise provides discussion of how dialogue affects participants, key facilitator tasks, and the key phases of such dialogues. The authors posit that dialogues focused on relationship building and potential action are typically built around a meta-structure that has application to dialogue processes that may last one evening, or over the course of several sessions. Their frameworks will be primarily used in explaining how ARS assists facilitators in their work with small groups.

⁸ "The key to sustained dialogue is careful listening to others to discover common interests and explore reasons for unresolved differences" (Saunders, 2001, p. 254).

Section III. Participants, Dialogue Meta-structures, and Keypad Questions Effects of Dialogue on Participants' Hearts and Minds

In their book about dialogue, Schirch and Campt suggest dialogues affect participants on three primary levels, which they define as concerning intellect, emotion, and spirit. Most relevant to this article are the effects are the domains of intellect/cognition (i.e. thought or mind) and emotion (i.e. feelings or heart).

With respect to intellect/cognition, the authors assert that dialogue affects participants by affecting intellect/cognition in two primary ways that are relevant here. First, the dialogue can teach them important "objective facts" that are relevant to their understanding of the issue at stake. Such an objective fact might be the pollution in certain parts of a community, racial disparities in income in a metropolitan area, or the annual employee turnover in a company. A second fact might be called a "perceptual fact", and this has to do with how people from various groups perceive a common reality. In a discussion within a company, a "perceptual fact" might concern perceiving company morale by administrative employees; in a community discussion, a perceptual fact might be the frequency of perceived daily indignities by particular racial groups. Such facts can force participants to reevaluate their sense of what is "true", which is an important step in the process of fully engaging in the potential of dialogue to form new possibilities for consensus.

Related to these points, Schirch and Campt also suggest there is an emotional impact of well-facilitated dialogue that is important to highlight. The authors assert the process of dialogue increases participants' understanding of different perspectives; in that, the process may be a rare opportunity for people from socially disconnected groups to hear simply nondistorted perspectives from people in groups they may not ever engage deeply. This increased understanding may extend to empathy, the authors assert, in the process of dialogue may result in participants gaining insight about why people in other groups see the world as they do. With this new insight, they may view them as less innately "other," and come to believe that, if faced with a similar set of life experiences, they might develop a similar set of perspectives.

Overview of Dialogue Meta-Structure

The literature review conducted for this article produced very little in the literature that addresses the underlying structure of dialogue. How are these effects on intellect and emotion to be achieved? Schirch and Campt provide a meta-structure model for dialogues the authors assert lies underneath many dialogue models and that they have used as a template in the dialogue design process. We will review briefly at a high level before a more in-depth discussion of specific tasks and facilitator moves involved in executing this dialogue flow. In the Schirch/Campt model, dialogues have four primary phases, each with essential objectives for the facilitator. (A more in-depth review can be found in Schirch and Campt, Chapter 5, pp. 36-57).

Phase 1: Introductions and Establishing Common Intentions and Norms

Key Objectives

- Introducing participants to one other and the topic
- Establishing the dialogue container by setting a tone and creating agreements
- Establishing broad commonality around intentions

Phase 2: Sharing Experiences and Perceptions

Key Objective

• Helping participants see they may have very different experiences and perspectives on the same issue

Phase 3: Exploring Diversity and Commonalities

Key Objective

• Analyzing the underlying social conditions that can produce disparate experiences and perspectives

Phase 4: Exploring Possibilities for Action

Key Objective

- Investigating whether there is interest in addressing the underlying social conditions
- Providing closure on the entire dialogue process

In summary, the transformative power of dialogue emerges from how these factors work together. The facilitator's job in Phase 1 is to use their personal presence and agreed upon guidelines to create an atmosphere where all perspectives are established as equally valuable to the group learning experience. In addition, in this phase the facilitator tries to give the

participants early experience of their common intention. Phase 2 follows, where participants gain a heightened awareness of the underlying similarities and differences in experiences and perspectives. If this is done effectively, participants develop a greater sense of the potential validity of perspectives very different from their own. In Phase 3, attention shifts then to probing the underlying social conditions —perhaps previously overlooked, not recognized, or not discussed openly—that created the simultaneous existence of different perspectives. Finally, in Phase 4, participants can explore whether there might be any value in individual or collective actions that address the conditions that have contributed to the previous social disconnection the dialogue process may have challenged. In this phase, the facilitator also tries to create an experience that helps give a sense of closure to the entire dialogue experience.

The next subsection provides a brief overview of different types of keypad questions. After that, the article will discuss how the different types of keypad questions can be used to help the facilitator accomplish the key objectives of each dialogue phase.

Types of Keypad Questions

Keypads can be used to ask participants any multiple-choice question. After posing a question, the facilitators can choose to display instantly the results; this display may be in a pie chart, bar graph, or other formats. Generally speaking, the answers to the questions are anonymous. On the facilitation of the formats of the questions are anonymous.

For the task of directing participant awareness, there are two benefits to displaying the range of anonymously provided answers regardless of the specific types of question. First, the projected public display of collective results invites everyone in the room to do what good facilitators are constantly doing, which is being mindful of the diversity of the room. It could be argued that this shift in awareness is the most important benefit of the technology. In many cases, dialogue participants are primarily concerned with their individual thoughts, and have to be nudged to focus on what the entire group thinks.

⁹ There is variation from one company's equipment to another on the number of potential answers that are possible. The authors have not heard of a company that allows more than 10 possible answers to any single question, although this may exist.

¹⁰ It is possible to manage the keypad distribution process so the facilitator can track answers to particular individuals; this is usually only done in very special circumstances outside classroom environments. The computer is always tracking answers to particular keypads, but if the keypads have been distributed randomly, the answers are essentially anonymous to the facilitator and everyone else.

Beyond directing attention to the group's collective response, the second advantage of the keypads is that responses can be considered relatively objective. Without the technology, any summary statement about "the group's response" is inherently subjective and interpretive. ¹¹ Thus the displayed results not only direct attention to the entire "mind" of the entire group, the results create a shared and somewhat objective picture of the diversity of the group mind that is less subject to interpretation than a summary created by a participant or the facilitator.

To refine this rather broad description of how keypad questions focus attention on the diversity of the group, we have found it most useful to think about the kinds of questions in four general categories, each leading the participant awareness to different type diversity within the participants present.

- 1. **Demographic Questions** ask participants to convey some piece of "objective" information about them. Examples: How long have you been with the company? What is your annual household income? Demographic questions lead participants to understand the diversity of participants' backgrounds.
- 2. **Fact Questions** ask participants to give their answer to a question that has an "objective" answer that can be definitively known with little dispute. Examples: What percentage of our company's employees leaves each year? What percentage of the nation are persons of color? Fact questions lead participants to understand the diversity of participants' knowledge.
- 3. **Experience Questions** ask participants whether or how frequently they may have had specific experiences. Examples: How frequently do you witness behavior from coworkers that run counter to our values of cooperation? How long has it been since you witnessed behavior that you thought was a result of racial prejudice? Experience questions lead the group to understand the diversity of participants' experiences.
- 4. **Perspective/Opinion Questions** ask participants their assessment of some situation or condition. How would you assess the level of morale in the company among administrative clerks? How far do you think the nation is from racial equality? Perspective questions direct the group's attention to the diversity of participants' worldviews.

¹¹ For the moment, we are putting aside philosophical arguments about the inherent subjectivity of any statement, no matter how "factual".

We believe dialogue—whether assisted by keypads or not— is largely about inviting participants to individually and collectively make sense of the many levels of diversity present, and how these multiple levels of diversity are related to their sense of self, their relationships with each other, and the topic. In the next section, we discuss our sense of an underlying structure to transformation-oriented dialogic processes, what the facilitator's tasks are at each phase of that structure, and how keypads can help with those tasks.

Section IV. How Keypads Assist Facilitators within each Dialogue Phase

We next go into more depth about strategies that a facilitator might take to accomplish these objectives, and discuss the way the keypads could assist with those tasks.

Keypads in Phase 1

As noted, in the dialogue model from Schirch and Campt, in Phase 1, the facilitator's goal is to establish connectedness and the dialogic environment. Critical objectives include:

- Making introductions to the participants and the topic
- Creating guidelines and highlighting insights about dialogue
- Establishing broad commonality around intentions

Making introductions.

With groups of less than 20 people (and sometimes with groups over that number) an important initial step is having some process of introductions to the full group. Certainly, the keypads cannot substitute for this process, which lets each participant experience her or his voice in the room and allows a potential first sense of connectedness between participants. While no substitute for establishing that direct first personal connection, keypad based demographic questions can be a very helpful supplement to this process.

In any situation, especially with strangers but often with work, organizational, or community acquaintances, people may have lingering questions concerning who the other participants are and their similarity or difference with them. If the right questions are asked in Phase 1, keypads are a vehicle that satisfies this curiosity. There are many examples of good questions that involve issues for which there are visual clues, like age, race, gender, or ability level; for these issues,

keypad results can give a definitive finding for people's sense of the demographic diversity. In addition, questions can also get at more hidden issues, like organizational tenure, place of residence, income, education, political affiliation, sexual orientation, or relationship to the immigration experience. The visually hidden nature of these issues makes these issues virtually impossible for participants to have good estimates from just looking at the group.

Demographic questions can also give the facilitator a chance to direct group attention to opportunities created by the diversity in the room. This is useful in any almost any circumstance and particularly important in the common situation where there are fewer attendees at the dialogue than might have been originally planned.

Agreements and lessons about dialogue.

As stated previously, the primary objectives of dialogue are transformation, understanding, and exploring options for action. However, there are some secondary objectives that have some importance to us, and we suspect, many of our facilitator colleagues. Among these are helping to make group participants more aware of group process and reminding participants that all group processes are chosen and have a significant impact on group experiences.

Demographic questions provide a platform for a brief but important teachable moment about group process. In discussing a public issue, knowing that a group is, for example, overrepresented with liberals allows the facilitator to remind the group to remain aware that their conclusions have been framed within a particular context of a group that is more liberal than the general community.

Besides teaching participants about the effects of demographics on the conversation, early demographic questions can be helpful to the facilitator in reinforce the message of the ground rules the conversation needs to be conducted in a way that is respectful of many positions. This is particularly true with questions of political affiliation and/or ideology. Groups tend to indulge semi-consciously in explicit or implicit bashing of missing perspectives. Demographic questions that highlight the presence or absence of liberals or conservatives in the room can be used by the facilitator to bolster the ground rule that it is important to stay respectful of all people, even as the group probes its disagreements.

Perhaps most importantly, the results of demographic questions can also have unexpected impact on participant's sense of empathy for others.

Scenario Number 1

At a medium-size meeting (50 people) on regional cooperation, an early demographic question about income was asked. About 40 percent of the room had family incomes over \$100,000 per year. Toward the end of the program, a participant stated that seeing the portion of high-income earners not only challenged her belief that wealthy people did not really care about anything but themselves. Knowing they were in the room also made her more open to being empathetic to their concerns, and not stereotype them.

Establishing common intention.

As discussed above, one task for the initial phase of dialogue is to establish a common intention among the participants. Mostly, this is best done in a process of introductions if an initial statement of intention can be worked into how the participants are guided to introduce themselves. However, the keypads can be of assistance, particularly when the dialogue has been convened in the context of organizational or community conflict. The following example is illustrative.

Scenario Number 2

The staff of an urban library system convened some focus group dialogues that were part of an assessment of the library's challenges. Within the library's culture, there had already been some evidence of a disagreement between those who thought that the library was making too many adjustments to cater to its changing demographics of people with lower reading levels versus those who thought the library should return to its original mission of serving accomplished readers. Among the initial questions, a question asked participants to assess the library's importance as a community educational institution. There was some variation in the answers provided, but not surprisingly, the answers were heavily skewed toward the answers "very important" and "important". This finding was used by the facilitator later to remind the participants there was a consensus the library was important, and the conflict was about how it should accomplish the mission of community education, not whether it should.

This dynamic is not unusual. In our experience, community or organizational conflicts often can be broadly described as between "complainers" whose focus is on advocating changes in direction, and "boosters", who favor tweaks but oppose major changes. In a continuing conflict, these camps often begin to view one another as enemies, and can ascribe nefarious motivations

(such as self-interest) to the other side. In such cases, an important Phase 1 task of facilitators is to infuse the dialogic container with the awareness that both sides of the conflict share a concern for the setting.

A way to introduce key facts into the dialogue.

One noticeable benefit of using audience response systems is that it allows a facilitator to introduce facts into the dialogue in a way that is more engaging than simply presenting them. Some authors have cautioned that facts should be introduced carefully into a dialogue so as not to derail the conversation (Schirch and Campt, p. 50). These cautions notwithstanding, the keypads can be an engaging way of getting certain facts in the room that may be important as background to the discussion. As important, if there are common misconceptions around some of these important facts, asking the group a fact-based question that is likely to produce many incorrect answers can have an important effect on the group. Specifically, demonstrating that people in the group know less than they think they do about an issue of relevance helps reinforce the need for participants to be in an open-minded learning environment. Less importantly, such a move would help the facilitator reinforce the notion of her or his leadership.

Scenario Number 3

In an early part of a meeting focused on racial dialogue, a group was asked a multiplechoice question about the portion of whites and persons of color in the United States. A majority of people overestimated the portion of United States that was people of color. (The most recent United States Census estimates put this number about 33%). Besides surprising people, the revelation of the incorrectness of the group gave the facilitator an opening to tell the group this is a common overestimate, and to ask the group what the implications of this frequent overestimate might be. One group member offered that if people knew the country was not as non-white as they thought, they might feel less defensive about policies that try focus on equity. This conformed to the facilitator's suppositions, but the comment was more productive to the group since it emerged from a participant.

Keypads in Phase 2

As discussed above, Phase 2 is essential for transformation-oriented dialogues as foundational in creating an experience where participants learn wide varieties of experiences and associated perspectives among the people present. In our view, the telling and hearing of very different experiences in response to neutral questions is essential to the dialogic experience. The keypads are not a substitute for this, but can serve as a significant supplement to the process of creating this experience for participants.

Demonstrating diversity of experiences.

One significant difference between people of color and whites is their experience of racial discrimination. It is our experience that many whites underestimate societal racial discrimination—and some further argue that people of color purposefully overestimate it—because they have fewer direct or second-hand experiences that are a result of racial prejudice. Conversely, many people of color presume that whites are in purposeful denial about discrimination because they and many people they know experience discrimination regularly; they presume this knowledge is shared. One primary task in a racial dialogue is to highlight that people in different groups have different experiences and perspectives about discrimination

To highlight this difference to a group, a facilitator not using keypads might ask a question such as: Tell a story about the last time you remember seeing evidence of racial discrimination affecting you or someone you know. After some number of people answer, the facilitator could point out the result (not inevitable but very likely) the people of color knew stories that were more recent and, often, more disturbing.

In a relatively small group with 5-9 people, hearing everyone's answer to this story is probably the best strategy. However, in larger small groups (10-15) or medium size/classroom-sized settings (15-40), it is less feasible to hear from everyone. Without keypads, the facilitator could hear from a few people, articulate the pattern that appears to be emerging, (e.g. "it seems that more of the people of color have recent stories"), and ask for additional stories from people from white and non-white groups.

A facilitator would want to be very careful about short-circuiting this process. However, the judicious use of the keypads could be used to accelerate <u>productively</u> the process of letting participants see the pattern of stories. For example, the facilitator might pose the question: how long has it been since the last time you can recall witnessing an act of racial discrimination? After the distribution of answers is shown, the facilitator might ask people who had answered

differently to tell their stories. In all likelihood, the pattern mentioned earlier would quickly emerge.

Some keypad systems have capacities that can make emerging patterns or answer very apparent. The systems the authors use allow the facilitator to combine the answers to two different questions and to show the correlation between the responses. (This can be done either in advance or improvisationally). Using this capability, the facilitator could show a slide that would illustrate the correlation between the frequency of discrimination and race/ethnicity. Such a slide might look like this.

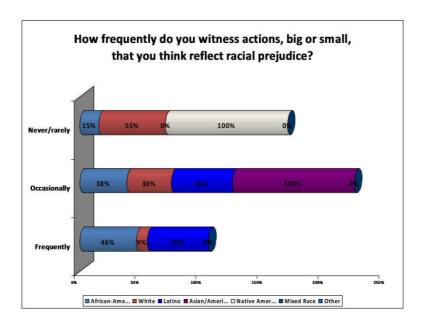


Figure 1

The clear evidence of a correlation between experience and demographics pushes the participants to see that people from different groups are having different experiences. It will also show that a generality about a group, even if true, may have limitations. There would undoubtedly be people of color whose most recent discrimination incident was not recent and white people who would have a relatively recent incident. In this way, even the correlation data is further reinforcing important lessons about diversity, while showing a generality that is important to understand within the dialogue.

Highlighting a diversity of perspectives.

According to the dialogue model from Schirch and Campt, participants' learning about the diversity of experiences is necessary, but not sufficient to create the optimal conditions for learning from the dialogue. It is also important that participants directly learn that people have different perspectives and opinions that often are linked to these different experiences. As should be clear at this point, the keypads' capacity to highlight a diversity of opinions gives facilitators a powerful tool for doing this very quickly.

Scenario Number 4

At a Black History month celebration that had been linked to the milestone represented by the election of President Obama, the participants were asked their opinion of the racial progress in the United States. About 15% of the participants stated they felt the nation had achieved racial equality, and about 15% reported they doubted the United States would ever achieve racial equality. The facilitator used this finding to remind the participants the collective challenge is to have a conversation that attempted to explain what is going on such that people could see the same issue so differently. In addition, by showing that some the distribution of opinion was not unlike the results from a nationwide survey using the same question, the facilitator linked the need for an open group dialogue to the need for a similarly open national dialogue.

Keypads in Phase 3

The primary facilitator task in Phase 3 is encouraging participants to examine the social conditions that might explain their differences in experience and perspective. For this purpose, the ability of ARS to highlight cross-tabulated data can be of significant assistance. In the library setting discussed previously, a slide showing that people in clerk positions were much more likely to report low organizational morale was useful to the group's examination of organizational morale. Similarly, a group's examination of racial equality might be enhanced by a data showing that people's frequency of experiencing discrimination was related to their sense of how far the nation was from achieving racial equality.

We recognize the smaller the group is the less valid is cross-tabbed data. Given that many people have a basic understanding this statistical fact, we are cautious about overly relying on such cross-tabbed data as the platform for discussions for small groups. Nevertheless, often, such

cross-tabs can be important when there is good representation from many groups and the total group size is a dozen or more.

Keypads in Phase 4

In Phase 4 of the dialogue model, the facilitator's primary objectives are to 1) create an opportunity for participants to explore possibilities for action, and 2) create a satisfying closure to the entire dialogue experience that has taken place.

Pointing participants toward possible actions.

In exploring possibilities for action, facilitators have a fine line to walk between honoring the full diversity of participant perspectives about action and being driven by whatever goals they as facilitators may have about dialogue as a means for social change. On the one hand, it is important the facilitator convey the dialogue has had a value in itself, regardless of any choice the people in the group make about action. The facilitator needs to honor many participants (and himself or herself), as all have likely joined the dialogue from a desire to do something about a particular social condition. According to the Schirch/Campt dialogue model, the facilitator's job is to remind appropriately participants that taking individual or collective action on the relevant social condition is an option, but to do this in a way that does not imply the group's experience was a failure if this option is not chosen.

As in the other phases discussed, doing a high-quality job of a facilitating a dialogue is the essential way of accomplishing this goal. In addition, the keypad questions focused on revealing participant opinions may be helpful in gently raising participant awareness about the potential for action. The keypads may point the way to the overlaps in how the participants think and feel about the problem that, if revealed, can point toward potential vectors of action. Keypads can be helpful in allowing collective inquiries for possible action, for example:

- An assessment of the importance of the social condition at issue.
- Prioritizing various barriers to improvement that may have emerged.
- The relative responsibility of some type of stakeholders versus others.
- The amount of hours per month people might be willing to spend on a new effort.

One frequent occurrence in this closing phase of dialogue is people making verbal pseudocommitments to future collective actions that are unrealistic. The disappointment created by

these unfulfilled commitments has some affect on making people cynical about dialogue efforts. If used skillfully, opinion question in Phase 4 can help participants see realistic possibilities for initial actions to decide about these possibilities.

Helping with Closure through Collective Reflection and Evaluation

Toward the conclusion of most dialogue sequences, facilitators often create some process where participants can offer their own reflections on what has happened, and perhaps what will remain with them. This is important in providing a measure of closure on the entire dialogue journey, and can help people go beyond their own individual experience and see how the dialogue has affected others. Also at the end of a process, some facilitators have participants fill out an evaluation form, which allows each person to provide anonymously feedback about their experience. Although not a substitute for either of these processes, the keypads can serve as a useful supplementary role to either of these processes, through a capability that neither of these processes can do separately.

Verbal reflections are a vital means of directing group attention to the hearts and minds of the individual participants who offer their reflections. When a dialogue has moved people, these reflections can often be quite stirring, and reflect the how powerful and unusual authentic dialogue across lines of difference can be. However, when several of these reflections are offered —all with different structures, focus, and emotional notes—it is often difficult to get a clear picture of how the dialogue experience affected the entire group of participants on basic dimensions like satisfaction, learning, and participation.

If properly constructed, written evaluations can do an effective job of providing a mosaic picture what the group experienced. We think, the best evaluations combine numeric and prose assessments, so facilitators can get both free form and structured feedback about various elements of the dialogue experience. The limitation is that these forms are not shared with the participants until much later, and usually are not shared at all. Thus, collective response on these issues is not a takeaway for participants.

Opinon-focused keypad evaluation questions with straightforward Likert scales on a few dimensions provide neither the emotional power of verbal testimony nor the specificity of written evaluations. However, they do provide an important benefit similar to the benefits of keypad questions in other phases discussed earlier: participants see their own responses in light of the group's collective response. This assists collective meaning making, and helps everyone avoid the all too common error of assuming there was more similarity between his or her own perspective and that of others.

Section V: Some Other Group Management Issues Regarding Keypads

Reviewing all the strategic and tactical issues relevant to using keypads in small to medium dialogue groups would take much more space than appropriate for an article of this length. However, it is valuable to reflect on some important lessons we have learned about how to position the use of keypads for the maximum benefit of the group.

As noted at the beginning of this article, we have found there is substantial skepticism about the use of electronic keypads by many professional dialogue facilitators. In fact, our sense is that participants are much less skeptical about these devices than people whose professional lives are dedicated to dialogue. Nevertheless, it is important that facilitators introduce keypads to a dialogue process in a way that is addresses whatever participant skepticism might exist. Since the trust that a group has in a facilitator is function of multiple variables—especially the personality of the facilitator—it would be impossible to give definitive guidelines that would work in every case. However, there are a few principles that may provide some degree of useful guidance.

Position the Keypads as a Potentially Useful Tool, Not an Essential Element

With or without the keypads, the facilitator should convey a heartfelt enthusiasm for the inherent value of dialogue. Group members need to know their verbal expressions are the core of the dialogue experience, not a supplement to the quantitative interaction of the keypads. There is an important strategic reason for this, besides the important need to honor the humanity of the participants. Occasionally, keypad systems can fail, due do operator error, computer or audiovisual problems beyond the scope of ARS, or even ARS difficulties themselves. Admittedly this is rare, but if this does happen, it would be devastating if the facilitator has positioned the keypad systems as anything more than a supplement to the core work of the dialogue, which is participants talking to one another.

There is a behavioral corollary to this beyond how the keypads are positioned initially. To use keypads most effectively to aid the dialogue, it is sometimes necessary to put the lens cap

back on the projector; the display of the diversity of responses should serve the group's dialogue, and not become the focus of the dialogue.

Enthusiastically Frame the Keypads as Helpful for Learning

It is valuable for the facilitator to convey enthusiasm for the general way the keypads can help the group's learning and dialogue. Especially when the underlying issues are somewhat contentious, it is important to frame the inquiry the keypads foster in ways that will not be perceived as biased toward any particular outcome. For example, in introducing the keypads at a race dialogue, the facilitators said: "We are here to talk about issues related to divisions based on race. What the keypads can do is to help us see what are the areas where we might have surprising consensus or even noteworthy divergence of opinion. Knowing this will help us more clearly what we need to talk about so we can all learn."

Clear Instructions and Sample Questions

It is important that facilitators give clear instructions about the keypads, partially because many people have a significant amount of anxiety related to anything that seems somewhat hightech. It is helpful to have an easy test question that does not require hard thinking or processing and may not be closely related to the central dialogue topic. This allows the participants to have a keypad experience in a relatively low-pressure environment.

Link the Keypads with Enjoyment and Fun

In our experience, there is a significant value in making an early connection among participants between the keypads and playfulness and enjoyment. As noted earlier, the keypads are essentially a way to bring attention to various dimensions of diversity in the room. Clearly, wrestling with diversity is a difficult challenge as the existence of wars, oppression, and entrenched social hierarchies attest. There is a value to the group then, in creating an early experience that shows how the keypads can make some dimension of diversity interesting, playful, or even fun.

Creating Energetic Shifts

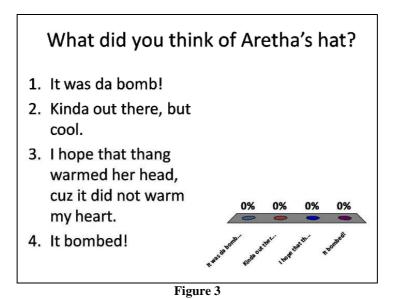
By positioning the keypads early in the dialogue as linked to both serious inquiry and playfulness, facilitators give themselves an additional tool for the sometimes important task of shifting the energy in the group. Experienced facilitators know that sometimes it is important to shift consciously the energy of a group; this is the purpose of icebreakers, stretch breaks, short energizers, and associated tactics. Facilitators can use ARS at strategic moments to serve the same energy changing effect. In particular, the keypad questions can be used by facilitators to enhance the sense of fun and laughter in a dialogue atmosphere, or to create energy through exposing differences of knowledge or opinion.

For example, shortly after the Obama Inauguration in 2009, we sometimes showed a picture of Aretha Franklin and her large bow-shaped hat, and asked group members their opinion of it.



Figure 2

Some of the answers themselves were humorous, and people often chuckled merely because the question was being asked.



In a project in football-obsessed Nebraska in early 2008, we asked an early question about prospects of the university after a disappointing losing season; this question had a similar laughter inducing effect on the participants (See Figure 4).



Please note that when one is attempting to use keypad questions for such a purpose, it is important to construct answers so everyone feels included; for example, the football question should include an answer for people who do not follow the team.

Some keypads systems have capabilities that, if mastered, create more options for creating energetic shifts. Specifically some keypads allow for constructing competitive quiz games. In

such a game, people are divided into teams based on some characteristics, point values are assigned to questions, and people answer questions individually but their answer contribute to a team score. If used sparingly, with questions people can relate to, and at the appropriate times within the dialogue process, such quiz games can serve as a valuable break from the oftendifficult intellectual and emotional work of dialogue and can serve to reenergize a room.

Democratic Decisions about Group Process

In our view, a most central responsibility of facilitators is using her or his wisdom to make good decisions about the sequence of events for the group. Nevertheless, there are times when the group may be split or in a quandary about a decision that have implications for the group's process. Scheduling when subsequent meeting will start or when the current meeting should end are common examples. Most facilitators have observed situations when discussing a fork in the road of a group process decision can feel as though it is taking longer than any of the options being considered. Sometimes, direct, immediate democracy is a good way of making such a decision and helping the group stay focused on its dialogic task.

Conclusion

Some Questions for Researchers and Practitioners worthy of Attention

Without question, one purpose of this article is to alert our professional colleagues of the significant advantages of the keypads in the context of dialogue facilitation. In our view, ARS allow dialogue focused meetings to become more engaging, inclusive, and as we just discussed, more democratic. It is also our belief there is a degree to inevitability to the increased use of these devices. Not only are standalone devices becoming more capable and less expensive, inexpensive solutions are emerging that allow participants to use text messaging from cell phones instead of separate devices. At this point, it is estimated that one million keypads are used in the nation, primarily in classrooms. As the devices begin to disseminate through the other types of gatherings, increasing numbers of people in the public will have experience with ARS. If these experiences are sufficiently positive, facilitators who are unfamiliar with the devices will face competitive pressures from those who have integrated their use within their practice.

As early adopters of this innovation, we recognize the various types of questions that emerge about the use of keypads. While all the questions are legitimate, some could be called practical

questions that we have answers for, while others are more conceptual questions that should be taken up by the field of dialogue and deliberation. We will present the former category first, and how we think about answers to these questions.

Do the devices take away from the intimate "high-touch" nature of dialogue?

It is important for facilitators to not be carried away in enthusiasm for seeing the entire group's responses to questions. As useful as the keypads are for addressing whatever sociological curiosity facilitators have about the group, it is critical to remember that participants typically come to connect to others through dialogue. If the facilitator uses the keypads judiciously and in service of dialogue, participants typically experience the keypads as additive to the intimacy created through dialogue.

Does it encourage passing over deep moments and looking at statistics instead of stories?

Facilitators need to remember that people may provide the same answer to a question but attach remarkably different levels of meaning to that answer. For example, an act of discrimination that occurred within the last week might be getting a poor table in a restaurant at one end or being abused by a police officer on the other. A facilitator asking a keypad question "how long has it been since you were the victim of prejudice" needs to remember diversity of significance in similar responses to the same question, and think through the way to keep the dialogue moving while honoring experiences that might be very impactful for participants. Doesn't keypad polling lock participants into the mental categories of answers created by the facilitator?

The most direct answer to this question is "yes", and this is particularly important for experience and perspective questions. Strategies for mitigating this problem: 1) Do your homework in advance on the question so you are more likely to understand correctly the range of participants answers. 2) Have a few non-participants review the question and answers to ensure they are sufficiently inclusive. 3) Create an "other" or "none of these apply" answer.

Does the polling shut down dialogue and move people to "locking in" their opinion?

People are somewhat used to seeing viewing polling results as "votes", and thus, final answers for a group. One key for facilitators is to remind participants early in a dialogue that one potential outcome of dialogue is changing opinions. In addition, unless the purpose is to make decisions, keypad use should be framed as polling – not voting – that will help the group <u>begin</u> its dialogue.

How often do the devices fail and how does this affect group dynamics?

Keypad technology is extremely reliable. We have very rarely experienced problems with the technology, and most of these rare problems occur from mistakes we have made. Nevertheless, it is important that facilitators be prepared to go forward if such problems emerge. In contrast to meetings with larger numbers that might not be fundamentally focused on interpersonal dialogue, facilitators who are using keypads to enhance dialogue should be able to make adjustments with relative ease.

Aren't the devices very expensive?

It is true the technology of ARS requires what might be called significant monetary investment, which many practitioners and communities may experience as very expensive. On the other hand, like any other apparatus with a long-term life, the costs per use gravitate to zero with additional use. More practically, the existence of relatively low-cost rapid shipping enhances the possibilities of sharing of keypads systems even by facilitator colleagues who are geographically dispersed.

Are these devices only used in the United States?

Most of our experience with this technology is limited to the United States, though the portability of the system allows for easy national and international implementation by the owner of the ARS. We have used keypads at an international peace builder's conference in Switzerland. Though we have no direct experience with other systems, a rapid review led us to at least one keypad company based in Europe.

Important Research and Reflection Questions for the Field

Our advocacy of increases ARS use does not prevent us from seeing there are many important questions the field of dialogue and deliberation should consider, including:

- What is the role of facilitator skill and personality in the effective use of keypads?
- What is the effect of group size on the efficacy of the keypads?
- Are there people whose verbal participation in dialogues decrease as keypad use increases?
- Does the availability of an anonymous channel for giving opinions to the group have any distorting effect on those opinions?

- Are there sustainable ways for professional facilitators to share keypads so their use spreads more quickly?
- What are the most important lessons about transferring capacity to use keypads skillfully from one facilitator to another?

As advocates and practitioners of the dialogic arts, we recognize the power of well-facilitated dialogue to transform individuals, small groups, organizations, communities, and potentially entire societies. We welcome the almost daily creation of new forms of Internet based communication that many people are using to create forms of online interaction that have many characteristics of dialogue. Yet in our view, there is no substitute for the potential for face-toface dialogue between people for helping us transcend our inherent limitations of our own personal experiences and take in other's very different experiences as equally valid and important as our own.

It is within this context we recommend the use of the audience response systems. As we have discussed, if used with requisite skill, ARS can be a vital tool for dialogue facilitators at many points facilitating dialogue. Most fundamentally, the keypads allow each person to know that their opinion counts equally, yet shifts the attention of every participant to the group's collective mind. While there are certainly other strategies for doing this, our experience is no other mechanisms do this as powerfully or as flexibly as these devices.

David Campt is a nationally recognized facilitator, consultant and author with more than 15 years of expertise in facilitating and managing diverse teams seeking to maximize collaboration, productivity and results. Dr. Campt and The DWC Group have successfully served a wide range of clients, including The White House, Members of Congress, the U.S. Navy, Princeton University, the Annie E. Casey Foundation and a number of for-profit businesses. In addition to having a specialty in leveraging computer technology to enhance dialogue experiences, Dr. Campt is also a well-known consultant and speaker on diversity, inclusion, and racial reconciliation. He is the co-author of *The Little Book of Dialogue on Difficult Subjects*".

Matthew Freeman is a consultant with the DWC Group and a Community Facilitator for Hope in the Cities, a Richmond, VA non-profit that uses dialogue as a tool to build just and inclusive communities among diverse racial, ethnic and religious groups. He has over 10 years experience planning and facilitating dialogues in the United States and Canada, and recently taught a course on dialogue at an international peace builder's conference in Switzerland. He specializes in helping groups more effectively embrace diversity and maximize productivity while including everyone's voice. He has worked with government at local, state, and federal levels, as well as non-profits, business, churches, and community groups.

Over the past year, Matthew Freeman and David Campt have been pioneering the use of audience response keypads to make small- to medium-sized group conversations more productive in business, government, and community settings. Together, they have facilitated keypad-based conversations with groups as diverse as the National Institute of Health, Boston's Andover Newton Seminary, and community forums across the country.

References

- Bohm, D. (1996). On dialogue. (L. Nichol, Ed.). New York, NY: Routledge.
- Martin, D. (2005). Dialogue and spirituality: The art of being human in a changing world. In B. H. Banathy & P. M. Jenlink (Eds.), Dialogue as a means of collective communication (pp. 71-104). New York, NY: Kluwer Academic/Plenum Publishers.
- Mayer, R. E., Stull, A., DeLeew, K., Almeroth, K., Bimber, B., & Chun, D. et al. (2009). Clickers in college classrooms: Fostering learning with questioning methods in large lecture classes. Contemporary Educational Psychology, 34(1), 51-57.
- Medina, M., Medina, P., Wanzer, D., Wilson, J., Er, N., & Britton, M. (2008). Innovations in teaching: Use of an audience response system (ars) in a dual-campus classroom environment. American Journal of Pharmaceutical Education, 72(2), 72-4.
- Norum, K. (2005). Future search conversations. In B. H. Banathy & P. M. Jenlink (Eds.), Dialogue as a means of collective communication (pp. 323-334). New York, NY: Kluwer Academic/Plenum Publishers.
- Saunders, H. H. (2001). Public peace process: Sustained dialogue to transform racial and ethnic conflicts. New York, NY: Palgrave Macmillan.
- Smith, M. K., Wood, W. B., Adams, W. K., Wieman, C., Knight, J. K., & Guild, N. et al. (2009). Why peer discussion improves student performance on in-class concept questions. Science, 323(5910), 122-124.
- Stanfield, R. B. (Ed.). (2000). The art of focused conversation: 100 ways to access group wisdom in the workplace. Gabriola Island, BC, Canada: New Society Publishers.
- Wilson, P. (2004, February). Deep democracy: The inner practice of civic engagement. *Fieldnotes: A journal of the shambala institute, 3,* 1-6.