

Cooperating Teachers' Impressions of the Whisper-In-My-Ear (WIME) and Traditional Communication Feedback Methods for Physical Education Pre-Service Teachers

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Abstract

Cooperating teachers (CT) were asked to use two different feedback techniques while mentoring pre-service teachers (PST) during an initial field experience. One PST received intra-lesson feedback from a two-way radio and ear-bud device, known as the Whisper-In-My-Ear (WIME) method, while the second PST received feedback in the traditional observation/written/verbal follow-up method (TM). CTs impressions and effectiveness of the feedback methods were evaluated to determine if one method was superior to the other. Overall, CTs indicated that the WIME method had several advantages: connection with their K-5 classes, a greater connection with the PST, ability to keep the lesson moving forward, and a faster progression for the PST. However, regardless of the feedback method, most PSTs ended the field experience demonstrating similar teaching competencies.

Introduction

In a quality physical education program, feedback helps students know teachers are watching them and allows students to assess their own performance which they cannot really see or feel on their own. However, as students mature, they benefit from information the teacher provides that they do not know themselves (Gallahue, 2001). In order to keep a productive learning environment for all students, k-12 and pre-service teachers, the need for congruent feedback (feedback focusing on the specifics of current task performance) is necessary (Rink, 2002). The need to provide immediate and relevant performance feedback is a vital function of effective instructional supervision (Metzler, 1990). Characteristics of effective feedback on instructional performance include: (a) brief latency between the act of teaching and the delivery of feedback; (b) congruence between the focus of feedback and instructional aim; (c) specificity; (d) feedback that is easily understood; and (e) the use of prescription when negative feedback is required (Metzler, 1990).

Ideally, since cooperating teachers (CT) spend the majority of time with pre-service teachers, they are in an ideal position for observing teaching performance and offering feedback, and have often been cited as having the greatest influence on student teachers (Ganser, 1996). However, there are instances in the literature describing missing or insufficient feedback practices of CTs. For example, physical education CTs were found to deliver minimal feedback, which was heavily skewed toward classroom management and planning for instruction and was general in analyzing teaching and learning behaviors (Tannehill & Zakrajsek, 1988). While Wilkins-Canter (1997) discovered CTs who usually gave feedback once at the end of the school day that averaged 5 minutes in duration and was not based on objective observation. Effective and efficient interpersonal communication skills are necessary to foster a quality relationship between PSTs and CTs (Hoover, 1988). That relationship is not likely without CT observation and feedback. Additionally, unstructured feedback may strain the professional and personal relationships between the PST and CT. In one study, CTs who gave little or no feedback or who avoided giving constructive criticism were perceived by student teachers as trying to avoid them and they contributed to role stress (MacDonald, 1993). In another study, PSTs who were less satisfied with their CTs pointed to patterns of disengagement whereby CTs did not take an active role in observation and conferencing (Borko & Mayfield, 1995).

In contrast, supervisory feedback or cueing that is behaviorally focused and delivered frequently and consistently has been shown to have a positive impact on performance of specific teaching behaviors (e.g., positive behavior feedback, positive skill-specific feedback, time utilization) (Smith & Steffen, 1994; van der Mars, 1988). Moreover, CTs can be efficiently trained to increase the frequency, detail, congruence, specificity, and accountability of their feedback (Tannehill & Zakrajsek, 1990).

The use of ear-bugging devices such as cell phones and two-way radios were found to be appropriate to use with a student teacher to improve the immediate congruent feedback during the initial phases of student teaching (Kahan, 2002; Giebelhaus, 1994). The wireless device allowed cooperating teachers to communicate cues that could effect immediate changes in teaching behaviors. Interestingly, both the cooperating teacher and student teacher enjoyed this method and considered it an appropriate means of communicating during the teacher training process.

This study aimed to determine if cooperating teachers preferred the ear-bugging method to the traditional method with pre-service teachers who are completing their first educational field experience and if this method improves the pre-service teacher's overall performance. In essence: What effect does using a two-way communication device have on PSTs' role satisfaction? What are PSTs' attitudes toward using the device? Is there an impact on overall performance?

Method

Participants

The 8 cooperating teachers (CTs), (3 males, 5 females), were tenured elementary school teachers from public schools located in central New Jersey with teaching experience ranging from 6-27 years. All participants had previously served as cooperating teachers for the sophomore field experience and therefore had received some training on pre-service teacher (PST) supervision. All CTs received positive recommendations from former PSTs as being motivated and highly skilled professionals. CTs were willing and received permission from necessary supervisors to mentor PSTs for both the fall and spring semesters. This would allow each CT to work with four PSTs: two using the traditional methods and two using the WIME method. These characteristics: skilled and previously utilized as CTs qualified them for the study and were identified as necessary components for selecting appropriate cooperating teachers (Blocker & Swetnam, 1995; Copas, 1984). CTs were asked in writing if they were interested in continuing their role as a mentor during the PSTs field experience and, if interested, in trying the WIME method. The PSTs were sophomore class cohorts registered for the elementary physical education methods course. This would be the first practical teaching experience the PSTs would have in their academic career.

Setting and Context

All elementary schools used in the study were in middle-class, suburban central New Jersey school districts with a variety of ethnic compositions. The study took place during the fall 2006 and spring 2007 school semesters. Each CT assigned the PSTs similar classes and courses content to teach. Whenever possible the PSTs were assigned the same grade levels and lessons.

Procedure

Approval for the study was obtained from school principals, cooperating teachers, and the College's Institutional Review Board. CTs were informed of the premise of the study: each semester one PST would complete the field experience by receiving intra-lesson feedback during the lesson from a two-way radio with and ear-bud device and written/verbal follow-up known as the *Whisper-In-My-Ear* (WIME) method, while the second PST would receive feedback in the traditional observation/written/verbal follow-up method (TM). Prior to the field experience starting, all CTs were supplied with two-way radios and several ear-buds of various sizes. Each CT was trained by college faculty to use the two-way radio, known as the *Whisper in My Ear* (WIME) ear-bugging method, how to apply the devices and how to handle any technical issues. All transmitter and receiver devices hung from the waistband and listening devices were inserted into an ear (with connecting wires hidden under the participant's shirt). During the initial days of the elementary methods course, PSTs paired up with a peer. Once paired, PSTs were randomly assigned a feedback method by the course instructor. PSTs who were assigned to receive the WIME feedback method were to meet with the CTs one time prior to the start of the field experience to practiced using the equipment, identify and respond to technical glitches, and discuss the created code system (or create their own) to identify problems and solutions. The code was to establish short phrases that could indicate more complex responses to situations, i.e. saying "discipline" may indicate to the PSTs that he/she needs to address student off-task behavior. During the final eight weeks of the semester, all PSTs started their field experience. The college physical education training program established that field experience hours

must be completed on two separate days, usually resulting in two classes being taught two days per week. PSTs were to create lesson plans, have them reviewed by the CT and receive feedback from the CT prior to the teaching episodes. During teaching episodes the WIME students would receive feedback via two-way radio in addition to a follow-up of verbal/written feedback. The PST's partner would only receive feedback via the traditional method of verbal/written feedback. After each weekly session, CTs were asked to make written notes about comfort level with WIME, student progress, types of feedback provided, and PSTs professional growth. Upon completion of the field experience, the CTs were asked to grade the PSTs on their overall performance using the standard college field experience evaluation rubrics. The researcher then conducted the qualitative study by asking each CT a series of questions of which both audio and written responses were recorded.

Design and Equipment

The study employed a case study approach which used non-statistical ethnographic techniques. A basic qualitative design was used to examine CTs responses specific to the two feedback methods: WIME and traditional observation/verbal. Detailed data were gathered through open ended questions that provided information and direct quotations specific to the WIME and TM feedback methods (Fraenkel & Wallen, 2000). The equipment was basic two-way radios: RadioShack, Motorola, and Midland all with a minimal reception range of one mile. One radio from each pair was equipped with ear-buds which allowed the PSTs to receive immediate feedback without the k-5 students overhearing the communication. PSTs using the WIME method had previously determined, during the initial meeting with the CTs, the size and shape of ear-bud that most comfortably worked for them. During the initial meeting with the CTs and PSTs using WIME, both parties used the radios and ear-bud to determine technical problems and solutions, and create a code system that allowed for minimal interaction during physical education practicum lessons. CTs were provided traditional lesson observation rating forms which allowed them to provide written feedback about specific criteria and to comment about their general observations. CTs completed these forms and provided a verbal follow-up with those students receiving the TM. A verbal/written follow-up was also provided to the PSTs using the WIME method. Prior to data being collected, the CTs were asked if they felt they had adequate training with WIME and if there were any technical difficulties through the field experience that would hinder them from forming valid opinions about the two feedback methods.

Data Types, Sources and Analysis

The researchers interviewed each CT, transcribed, analyzed, compared, and reported the responses to the questions about the feedback methods. Question categories were: (a) CT's connection to k-5 class, (b) connection to PSTs, (c) lesson interruption/modifications/ growth, (d) initial frustration, (e) improvement rates, (f) types & rates of feedback, (g) ending professional qualities, and (h) CT's feedback method preference. Additionally, CTs were asked to grade PSTs based on the college teaching performance assessment form. The researchers independently reviewed transcripts and identified key words and suggestive themes in underlying responses.

Results

Interview Question 1: Did you feel that one method helped you to stay connected to your class without actually teaching? Overall, six indicated that WIME helped them stay connected with their k-5 class without actually teaching. Interestingly, a teacher of 17 years commented, "When starting working with a new student teacher or pre-service teacher, one of my major concerns is losing contact with my class, or watching them get out of control when not under my supervision. I felt with the radios, I now had control not only over my class, but a better connection with the student teacher" while another newer teacher noted that "I never realized how stressed I was about giving up control of my class until I compared the two methods, I still felt in charge, or as you put it, connected with the WIME method when they (the PSTs) took over." Another similar comment addressed the point, "Although I was now on the sidelines, I was still actively engaged in the class and could help her (the PST) when she became stuck or frustrated, without having to physically interfere with her lesson. But even more importantly, it allowed the students to see her in the leadership role. They looked to me far less when I was completely removed from the lesson, unlike when working with the verbal discussion at the end of the class." Conversely, one other teacher noted that

"I am usually very involved the PSTs introduction, so I didn't feel any difference in how connected I was with my class, I always feel connected, usually more so when someone else is attempting to assume control."

Interview Question 2: Did you feel that you had a greater connection with one of the PSTs because of the feedback method? Upon the completion of the study, six CTs reported that during and after the field experience, they felt a greater personal/professional connection to the PSTs using the WIME feedback method. They most attributed this to the fact they felt they were working as a team to make the lesson successful. "The WIME PSTs and I spent much more time together than the TM PSTs. We spoke almost twice as often, discussing the lesson in much more detail, specifically in areas when there were a lot of transitions. When this was the case, we discussed our radio code to make sure we understood each other, and overall, we spent more time together because we spent a few minutes at the beginning of each day making sure the radios worked correctly, not to mention the follow-up sessions that usually address how glad we were we discussed certain issues before they arose. The TM students, I feel, got the amount of attention I usually supply to my student teachers. But this varies because, as you know, with the elementary class schedule, sometimes there is little or no time at all after class to thoroughly review the student's performance. At least with WIME you know they received quality information during the lesson, so if we missed the review after class, it wasn't a huge problem. Overall, this would be my comparison, although I always felt like a mentor, I felt more like a partner with the WIME student and more like a cooperating teacher with the TM student." Another teacher noted, "I would wake-up in the night with an idea of a better code to use in a particular situation. I would email the student the next day and the student also did the same with me. With the WIME method we spent more time thinking about better ways to use the walkie-talkies, which forced the student and me to communicate more, which lead to more of a friendship, or at least some funny conversations." One CT said that "with this method (WIME) you are almost forced to make an extra effort to interact with the PST. In the beginning it takes more time then the traditional method, however, because of it, you feel a bond with your student teacher." However, a female teacher with ten years experience said she did not feel a difference in the personal or professional connection, because she made a point having a "sit down" with both PSTs to see what they wanted out of the experience and what activities they do outside of school that can help then during their field experience. She indicated that "if more CTs took the time to do this they would have a better relationship with all of their student teachers."

Interview Question 3: Did you feel that one method helped the pre-service teacher keep the lesson moving forward without actually interrupting the lesson/were they able to make modification/corrections to the lesson(s) immediately? All eight teachers indicated that in most situations this was a major benefit of the WIME method. "Unless there was a dangerous situation that needed immediate attention I used the radio from the sidelines to let the PSTs know they needed to make certain changes to the lesson. When using the traditional method I needed to walk into the lesson (or have them walk over to me), give a tip and then resume the lesson. It was distracting to everyone involved, the PST, my students, and me." Two other teachers made almost identical comments, one noted, "With the radios I didn't usually need to impose on the PST's lessons. If there was an emergency, like a fight about to break-out or students were putting themselves or others in a possible risky situation, I stepped in. However, I felt I did a lot more stepping in, or should I say yelling in, with the TM pair. Both methods helped the lesson keep moving, however with the radios I could communicate the problem or concern with the lesson, give a suggestion and let him apply the information. Most of the time this helped him keep the lesson moving without physically getting involved"

As for the question about were they able to make modification/corrections to the lesson(s) immediately? The CTs felt strongly about this question and wanted to ensure that every student was getting credit for professional growth. All CTs indicated, in one fashion or another, that the PSTs, regardless of feedback method, used the feedback to make changes to either the current lesson or subsequent lessons. Comments included, "it was extremely cool to see the WIME student take my comments and immediately put them into action, however, the TM student took my comments and notes from the end of the last lesson and implemented at least one of the major comment which helped improve their overall teaching ability." Another teacher remarked that "the TM PST usually tried to improve on their teaching in future lessons, however with the WIME, the implementation of feedback was immediate and results were usually so positive, that the same feedback was not needed additionally like it was with the TM PSTs. Both sets

of my students implemented feedback, but, for me, a more noticeable impact was seen with the WIME PSTs.”

Interview Question 4: Did you feel that the one method helped reduce pre-service teacher’s initial frustration? This question split the CT down the middle. Four specified that the WIME method led to less frustration while the other half said they saw no difference, that most all students showed some degree of frustration through the field experience. One teacher expressed that “with the additional time spent talking about the lesson and the immediate feedback from the CT, the PSTs got stuck less often and showed less frustration during and after the lesson, than the TM PSTs. Although I saw both the WIME and TM students throw their hands up a few times and look at me with that ‘now what’ look. Because of the radios the students didn’t have to know the PST was having trouble, we could work through it together. With the TM, it was harder with both of them. I am not sure if it was the feedback method or the students themselves, however, several times after the lesson, the TM students made comments like ‘I didn’t know what to do’ or ‘that was a disaster’, ‘what a fiasco’ while the WIME student would say ‘thanks for the help’ or ‘I wouldn’t have thought of that’. Their comments were usually not as self-defeating or discouraging.” Again another teacher remarked that “My PST said, ‘geez, I was glad we talked about that before the lesson and how to interpret the code, because if not, I would have been like a deer in headlight’. Where one of my other TM students told me after a lesson, ‘I know you needed to step in and help me because it was getting out of control, but I feel like a loser when you do. I know the student think I am a push-over.’ This was very eye opening for me, because the same lesson was taught with a more difficult class by the WIME student with little frustration and I feel it is because of the WIME.”

Interview Question 5: Comparing the two methods, did one student progress/improve more rapidly than the other, or were they similar? Seven CT indicated that the PST trained with WIME progressed faster during the first several weeks of the field experience. They felt it was because they and the WIME PST spent additional time speaking about the lesson, other communication/code issues and possible problem areas prior to the lesson. “I could see immediate overall improvement with my WIME students. Their confidence seemed to be higher, and the ability to react to situations after being given feedback only once was really impressive.” Additionally, “I think using the walk-talkies increased both PSTs’ comfort level because I was there as a security blanket for them. For that reason alone, they tried more with the students, acted less fearful, and help was given when needed which kept the lesson going. For one WIME PST, I believe, because she knew she had my help, her fear of making a mistake didn’t get in her way. So she tried more and got much more out of the experience than her peers.” Only two CTs didn’t see any noticeable differences in the PSTs’ progression of professional behaviors. However, of the previous six teachers, five revealed that although they thought the WIME student progressed faster, it may be attributed to seeing immediate lesson and professional behavior changes, as compared to waiting a day or two in between lessons for the TM students to show if the feedback would be implemented.

Interview Question 6: As the pre-service teacher improved, did you feel you used the WIME/TM less than in the beginning and feedback content was less specific or minimized? All CTs specified that they used much less feedback as the field experience progressed for both methods, however, at the end of the field experience the feedback they were giving was still very specific. “This being their first teaching experience, I provided a great deal of feedback at the beginning. I felt I used the radio every minute or two for the first two weeks, and then every few minutes for the next few weeks and then sparingly towards the end. For the TM students, I was writing novels for the first 3 weeks, at the end I got it down to a page. But if I had to compare the two, I think in the beginning I actually gave more feedback to the TM students. I did so because after the lesson I had to refresh their memory about certain situations, some of which they couldn’t recall, and then give suggestions on how to deal with them in the future. With the WIME, although feedback was given in short clips, even one word, the follow up was much easier because the students could recall situations much more clearly. Towards the end, it was about the same amount of feedback for all PSTs.” A second teacher gave detailed accounts of how she used WIME much more during the first several weeks and sparingly (almost not at all) in the last 2-3 weeks, at which point she when they felt the PST were developed enough to try and problem solve on their own. She was less likely to jump in and offer suggestions unless the PST specifically asked for help. Conversely, “I did not use this same approach with the TM student. As the weeks progressed I still provided my write-up with all points I felt needed to be addressed, but luckily those major areas that needed improvement decreased so I provided less feedback during the follow-up.”

Interview question 7. Overall, by the end of the field experience, regardless of the feedback method, did the students exhibit professional behavior and teaching capabilities that were expected (was one superior to the other?) Overall, although there were many positives to the WIME method, it seems that the written/verbal feedback method has proven still to be extremely effective. The majority of CTs agreed that all PSTs finished the field experience demonstrating about the same teaching competencies. This was attributed to the high quality feedback supplied to the PSTs after each teaching episode. Although it may have taken the TM group longer to progress, their completion point was still acceptable for PSTs at this level. The CTs completed a 'final teaching assessment' rubric, an assessment tool used for feedback purposes, not for grading purposes. A male teacher said, "I thought for sure when I was filling out the final evaluations I would see a difference, with the WIME student performing better, but as I read the categories and really examined the student's teaching qualities, they all ended up with almost the exact same percentage grade and overall feedback comments. I think the only area where there was a difference was in the enthusiasm category, and that relates more to personality than anything else. I am pleasantly surprised to see the final grades." Another noted that "I thought by week five they were exhibiting similar teaching qualities. I would hope so since I am pretty demanding, but I think the PSTs' progress was easy since the students were so well trained in planning, teaching styles, skill development, and classroom management that they really just needed a place to see all those things put into action. In the past the field experience students have done well and I wouldn't expect anything less, regardless of the feedback method." However, when CTs were asked to compare their two students for each semester, two noted that regardless of the feedback method used, they felt that the TM student would have performed better. One said, "Although I used the TM with this student, he had professional qualities far beyond his years and would have done well even if I didn't give him any feedback at all, he has a natural ability to react and adapt to most situations, he is a natural, so he outperformed the WIME student. It would be hard for most PST to exhibit professionalism like his and I have colleagues who, after 5 years, aren't as good as him". The other remarked about her student who used TM "she had such a connection with the students, my style of teaching was so different from hers, that once I gave her feedback, she changed it to fit her own style, I don't think her style would work if I was presenting it, but it sure worked for her. I think she would have ended up at exactly the same place in the same time period regardless of the method."

Interview question 8: Did you prefer one feedback method over the other or would you prefer to use one method over the other? Although every teacher had their own opinion about this question, there were three main categories of answers. Three teachers indicated they would use a mix of WIME and TM. These teachers liked the dialog it helped create with the PST, how it changes the relationship from CT/PST to partners, and that they felt all parties can get immediate successful results. They did note however that they felt no lesson was complete without a verbal follow-up. Another teacher noted "I loved using the WIME, I felt involved in the lesson, connected to the PST and my students, plus I thought it was extremely helpful to help the lesson keep moving. I think it is a necessary change to the old method of providing feedback, at least in the initial stages of learning the profession". Two teachers reported that although they see the benefits in using WIME, it was time consuming and since the students ended up with similar grades, they would prefer to use the TM in the future." The remaining three specified that they saw value in both methods and they thought it would be best to see what method their PST was most comfortable using. One option would be to give each PST a taste of both methods for the first few weeks and then use whatever method or methods works best from that point. As with teaching k-12 students, flexibility is a necessity when considering the training methods provided for our beginning teachers.

Discussion

Of all the findings four were of special interest. The first was that the majority of CTs indicated that while using WIME, it helped them feel closer and more connected with their k-5 class without actually teaching. Through the WIME method the CTs were still actively engaged in the class and helped the class move along, without having to physically interfere with the PST's lesson. This is critical because many CTs may find it difficult letting others teach their class, especially those who have little or no prior experience. Through the WIME method, CTs may now use their PSTs as part of a ventriloquists act if necessary. Interestingly, six CTs reported that during and after the field experience, they felt a greater personal/professional connection to the PST using the WIME feedback method. They most attributed this to the fact they felt they were working as a team to make the lesson successful. This corroborates the "we'll do it together" style termed by Rikard and Veal (1996). As expected, CTs suggested that the PSTs

trained with WIME progressed faster during the first several weeks of the field experience. Again they felt it may have been that they and the PSTs spent additional time speaking about the lesson, other communication/code issues and possible teaching difficulties prior to the lesson. With the additional time and immediate feedback from the CT, PSTs got faltered less often and showed less frustration during and after the lesson. However, most noted that they used WIME much more during the first several weeks and used it sparingly in the last 3-4 weeks, when they felt the PSTs progressed enough to try and problem solve on their own. Additionally, CTs were less likely to jump in and offer suggestions unless the PST specifically asked for help. Overall, although there were many positives to the WIME method, it seems that the written/verbal feedback method is an effective and vital component to teacher training. As found in a previous study (Giebelhaus, 1994) the majority of CTs agreed that all PSTs finished the field experience demonstrating about the same teaching competencies. This was attributed to the professionalism and skill level of the CTs and their ability to provide PSTs with the feedback necessary to be successful teachers. Although it may have taken the TM group longer to progress, their completion point was still more than acceptable. Overall, regardless of the feedback method, if CTs and supervisors play an active role in the training process, by providing feedback and allowing students to explore their own teaching, PSTs will flourish (Skinner, 1997). As in Kahan (2004), the WIME, like other feedback methods, is an effective & valuable tool for a CT or supervisor to use as an additional training tool.

Considerations and Reflections

Qualitative research must be considered contextually bound and inferences tentative (Fraenkel & Wallen, 2000). However, in light of the robustness of certain data and the interviewee corroboration of it, the following points may transfer to other settings.

1. If CTs use technology that provides immediate feedback, the outcome may enhance the professional relationship between the CT and PST and rate of PST learning.
2. Levels and trends of various communication characteristics may be retained when using a two-way radio. Analyzing the types of feedback (managerial, instructions, informative or constructive) or the frequency of feedback during all stages of student teaching or field experiences may be beneficial for improving the PST and CT relationship and learning experience.
3. Technology is valuable for promoting CT-PST initial communication. It allows for PSTs and CTs to address potential problems prior to, or immediately after, their initial occurrence. Technology may assist PSTs through difficult or stressful teaching situations while still providing K-12 students with a well run physical education class
4. Although, the use of technology is advantageous, the use of it in combination with the traditional observation/verbal follow-up method seems to work best for all parties involved.

Future Directions

This study should be replicated, in similar and dissimilar settings to determine if findings are consistent with this study. Additionally, it is important to include students' voices in future research to confirm or reject the perceptions of ear-bugging effectiveness on PST learning. This study focused on first year field experience students. Future studies may compare or contrast the need for technology in additional field experiences or the culminating student teaching experience. Replications involving multiple classes, several PSTs of varying abilities and different school levels may be of interest. Other points of focus may be a greater control of the types of communication (e.g., mandating communication to be instructionally based) and involvement of the university supervisor independently or in concert with the CT.

This study used non-statistical ethnographic techniques. Future studies are recommended that express more quantitative and experimental approaches using statistical comparisons with hypothesis testing. Quantifiable variables may include student time on task, CT's communication length, or PST reaction time to problems. In general, rigorous testing of the WIME devices with quantifiable outcome variables such as classroom and behavior management.

In conclusion, results of this study suggest that the unique niche filled by two-way communication during initial PST field experiences makes a valuable tool for CTs to provide immediate congruent feedback with maximal impact for the PST and the K-5 student. Regardless of the circumstances and skill level of PSTs and CTs in their respective roles, WIME usage may reinforce what, until now, has been left to traditional communication formats.

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