In-service and Pre-Service Teacher Training: A Study of Online Dialogue

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Abstract: This brief paper reports the design, progress, and preliminary results of a study being conducted to determine the nature of online dialogue among in-service teachers after training in the use of a student/teacher hypermedia software tool. In-service teachers were trained to use behavior support software for students with emotional behavior disorders. An online discussion following the training was designed to allow participants to discuss the implementation and use of the program. Data are being collected via an electronic archive of all participant responses. Analysis includes the coding of types of responses as well as qualitative determination of emerging themes. Questions about level of understanding, support offered, evaluative comments, and critical thinking will be analyzed. Study design, data collection tools, and preliminary results will be shared with the audience.

Software to Support Students with Emotional Behavioral Disorders
Integration of students with emotional behavior disorders (EBD) into the public schools is problematic (Simpson, 1999). By successfully changing problematic behaviors and developing skills for success, children with EBD are likely to improve their learning and social experiences at school. Little focus has been placed on assisting this population through specialized software to date. One new program, a multimedia tool to help children develop self-management skills, is now available. KidTools (Fitzgerald & Semrau, 2000) is a software program designed to provide students tools to manage their own behavior, and to provide teachers with information about the strategies. Through the use of these tools, children are likely to benefit from the positive supports to maintain more control over their behaviors. However, students must be taught and then guided to use this software system effectively. Likewise, teachers must understand the background and implementation of the software tools. However, according to Woodward, Gallagher, and Reith (2001) a dilemma exists in that the developer's intent and the teacher's use often do not coincide.

Design of the Online Discussion for Implementation of KidTools
In this study, the interactions of teachers learning to use the KidTools (Fitzgerald & Semrau, 2000) behavior support software program were archived in the forum discussion section of a web-based teaching software program. Often during online discussions, participants are reluctant to begin the discussion. Therefore, it was necessary to encourage discussion through provocative open-ended questions as well as in-process prompts for more meaningful and in-depth dialogue (Bonk, et al., 1998). In order to prompt participant involvement, forum topics and open-ended questions were posted before the discussion began and discussion leaders from the research team sustained participant involvement with prompts.

Research questions in this study are:
1. Did social discourse during the on-line discussion demonstrate a higher level of understanding or innovative use of the KidTools software?
2. Did social discourse provide evaluative comments about the software?
3. Did emergent themes suggest that the intent of the software developers was intact?
4. Did teachers provide scaffolds for their colleagues?

Methodology
The conference was held as an open-ended discussion for pre-service and in-service teachers with three experts online for ten days, followed by continuing, non-facilitated discussion for five days. The topic of the conference was self-management strategies for children. All participants received a CD with the children's program *KidTools* to review prior to the online discussion.

Participating volunteers were asked/prompted to discuss implementation issues during an online conference. After the conference data analyses for frequency and types of contributions were performed. A qualitative analysis determined emerging themes associated with the instruction, implementation and use of the KidTools behavior support software. A coding system was adapted for this study from one created by Oliver, Omari, & Herrington (1988). The coding of responses were as follows:

Social (S)	not discussing the topic
Procedural (P)	discussing steps and procedures
Expository (EX)	exchanges about facts and knowledge without elaboration
Cognitive (C)	exchanges that demonstrate critical thinking and reflection
Application (A)	discussing use of innovation with children in specific settings
Evaluative (EV)	exchanges of personal likes/dislikes without critical or reflective thinking

Preliminary Data

There were 97 participants in the conference (33 active participants), three national experts, and two software developers involved in the conference, with 131 messages posted. The average postings during the facilitated portion of the conference were 15/day with an average of 24 themes per day, in contrast to an average of 2 postings per day with 2 themes per day during the non-facilitated portion of the conference. Demographic data were collected to discern participation patterns from user differences based on training setting, reason for participation in the conference, access to Internet, prior teaching experience, and previous experience in electronic conferences.

Importance of the Work

Coding of archived responses during asynchronous on-line electronic discussion helps us understand the type of responses and accumulation of learning that occurs (Henri, 1992). The coding system was used to analyze statements and social interaction among teachers who participated in workshops to learn the behavior support software. When providing in-service training, trainers assume immediate implementation of what was learned. The post training discussion format helped sustain the dialogue about the use of these behavioral supports and assisted in implementation. Information was gained to improve future online discussions as supplements to in-service training. The online discussion also aided developers in evaluating whether the software was used as intended, and if not, what features or changes are desired.

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