Metacognition in the Composing Processes of Young Adolescents Who Are Academically Gifted

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Researchers have studied metacognition extensively in the last 40 years. They have examined its relationship to learning and cognitive development, and its role in intellectual problem solving of all kinds, including the composing process (Flavell, 1975; Sitko, 1992; Shore, 2000). Most investigations have focused on populations other than middle school students and tasks other than writing. Relatively little research has centered on how gifted young adolescents metacognitively engage as they compose written discourse.

Procedures
This study addressed the interrelationship of metacognition, writing, and gifted young adolescents. To identify the metacognitive strategies used by gifted 8th graders as they compose exposition, four gifted subjects participated in two procedures: (a) interviews, in which they reported what they considered to be their usual metacognitive strategy use when they compose, and (b) think-aloud episodes, during which they composed expository papers while contemporaneously verbalizing their thoughts. The subjects were not explicitly told during the interviews that metacognitive strategy use was the target of the questions.

The study proceeded in two phases. Phase I examined the use of metacognitive strategies reported by two subjects in interviews and in composing aloud sessions. The strategies were organized into working taxonomies by means of the ethnographic procedures domain and taxonomic analysis (Spradley, 1980). Each taxonomy contained domains of strategies used to organize, control, and navigate the writing process. Interobserver reliability was established for two trained observers and the researcher for the identification of strategies in both sets of data (.83 and .93 for interview and composing aloud data respectively). In Phase II, two additional gifted students were subjected to the same data collection and analysis procedures and the working taxonomies were extended into final taxonomies.

Results
Results indicated that all subjects reported using the same five broad metacognitive domains of strategies as they write. When the subjects composed aloud, two of them applied strategies from four of the same five domains and two engaged all five domains. The domains are: (a) plan text and/or cognition, (b) evaluate text and/or cognition, (c) recognize difficulty with text and/or cognition, (d) respond to difficulty with text and/or cognition, and (e) repair difficulty with text and/or cognition. An example of the 192 strategies that were identified is “checking the meaning of text for consistency with the thesis is a way to evaluate text and/or cognition.” Although all subjects reportedly use strategies in all five domains when they write exposition, only two subjects actually applied strategies in the Respond to Difficulty domain when they composed aloud.

Discussion
All subjects appear to have more strategies available for use than they actually apply and all employed strategies that focused primarily on the development of overall meaning and on deep structure of text. Additionally, they all wrote papers at higher abstractive levels (Britton, Burgess, Martin, McLeod, & Rosen, 1975).

Various limitations of this study prevent generalizations. However, outcomes raise questions for further investigation, including the following: does abstractive level of discourse require different metacognitive strategies? Does the writing process unfold differently for each individual? What are the pedagogical implications of this research?

References