Motivation orientation, planning, and self-evaluation strategies were examined in 25 students in grades 6 through 8. The students' answers to the surveys were audiotaped, transcribed, and analyzed. Recurrent themes were identified and were chosen for examples that most reflected students' ideas and strategies. On the issue of motivation, the importance of doing well evoked both external and internal reasons for the students. For questions concerning planning, it was found that participants attempted to faithfully follow their teachers' task demands. Self evaluation was gauged by the degree of help anticipated or sought during an activity and the degree of confidence felt about the outcomes of each activity. The results showed that participants expressed themselves more spontaneously before doing an academic task. After completing the task, they were more reluctant to discuss their beliefs about the task-at-hand. The second significant implication concerned the methodological strategies of probing the before and after self-regulation process. Planning does not just occur in the early phase of the task but can be an ongoing process. Findings suggest that tapping different moments in the process of self-regulation is important. (JDM)
Self-Regulated Learning in Early Adolescence: A Qualitative Analysis

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Self-regulated learning in early adolescence: a qualitative analysis

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Key words: Self-regulation, adolescence, planning, motivation, self-evaluation

Academic evaluation at its best teaches the student to plan, regulate, and monitor his or her learning. With respect to the evaluation process, the teacher prepares students for optimal success so that they may improve their capacities, develop their skills and construct knowledge, all of which represent the real goals of education (Resnick & Resnick, 1991). Self-regulated learning, or the process that mobilizes and reinforces cognitions, behaviors, and affects toward goal attainment (Zimmerman, 1989, 1990), is an integral component of the formative function of learning and even more as Scallon (1997) expressed it, of the formative evaluation of autonomy. A culture of learning that encourages the student to exercise his or her self-regulated strategies when participating in an activity or when studying or doing homework is essentially formative, in that it contributes to better overall functioning and rewarding anxiety-lessened academic performance. Fourteen strategies have been proposed by Purdie and Hattie (1996): self-evaluation, organization, transformation, goal-setting, planning, search for information, self-reinforcement, search for social support, revision, memorization, environmental setting, repetitive practice, note taking, and self management.

In this qualitative inquiry, part of a research program on self-regulated learning, we examine specifically how young adolescents express their motivation orientation and their planning and self-evaluation strategies in an academic task. Twenty-five grade 6 to 8 students (12 to 14 years of age) participated in this study. These students are distributed almost equally according to gender, grade level and ability level. Ability levels were distributed symmetrically in the following manner: 6 learning disabled, 12 regular and 7 gifted students while the gender division was 14 females and 11 males and the grade level distribution was eight grade 6 seven grade 7 and 10 grade 8 students. The students came from different class groups and homeroom teachers.

A semi-structured interview questionnaire which included motivation, planning, and self-evaluation questions was presented individually to each participant before doing a regular class learning task, in this case either a mathematics, reading, writing or arts activity. The motivation questions investigated the importance of doing well, the goal orientation and the effort exerted when encountering problems. Self-evaluation was queried as the degree of help anticipated and sought as well as the degree of confidence felt with regards to the academic task at hand. The three planning questions asked were the following: Why do you think your teacher is asking you to do this assignment? How are you going to do this assignment?, and Why do you plan to work at Level 1, 2, 3, or 4? The answers of the participants were audio-taped, transcribed and analyzed as to their content. A qualitative comparative analysis of the discourse of the participants was done as to gender, ability level and grade level. We identified recurrent themes and chose exemplars that reflected salient ideas and strategies of these participants. The results obtained for each of the three strategies examined are presented below.
Motivation

The issue of importance to do well either evoked external or internal reasons. Talking about importance varied as to grade level. From grade 6 to grade 8, there was a steady increase of the number of responses. External relevance, whatever the ability level, was more valued especially as to grade obtained and the specific assignment. Grade 8 students emphasized strongly the importance of grades. Most significant, the internal motives were evoked only by female respondents.

Goal orientation was also seen as an outer-oriented or inner oriented process. Female students tended to be more specific in their goal statements and L.D. and gifted more than regular students. As students proceeded from grade 6 to grade 8 their goal orientation aligned themselves to outer standards, that is, rubrics of the provincial standards.

Relative to how they would solve difficulties encountered during a task, students were less prone to express their ideas. Nevertheless, seeking help was the dominant strategy, especially from teachers, and more so for grade 7 students.

Findings

To the question, “Is it important for you to do well on this assignment?”, designed to address the issue of student motivation, we obtained 28 individual responses and nine types of statements (i.e., Factors) emerged from the analyses. While some of the factors stressed the importance of grades, one’s academic future, and a particular content area; others focused on the psychological constructs of intrinsic satisfaction, perfectionism, and personal development (i.e., Inter/intra).

When analyzed from the perspective of gender, there were more female statements than male ones (i.e., 17 female, 11 male), and secondly, statements which emphasized the factors of intrinsic satisfaction and intra-personal development were exclusively made by female participants. As one gifted female Grade 8 student answered, “It is important for me to do well on the assignment because it’s my drive in life.”

When analyzed from the perspective of ability level, it is important to note that half (14) of the statements made by regular (12), gifted (6), and learning disabled students (10) focused either on the importance of grades or the specific assignment at hand. Whereas the statements of nine students (i.e., 4 regular, 2 gifted, 3 learning disabled) focused on the first factor, the statements of five students (i.e., 2 regular, 1 gifted, 2 learning disabled) emphasized the second factor. While reflecting upon the value of her current assignment, a learning disabled female Grade 8 student said, “When you look back on it, it’s a great memory.”

The analysis from the perspective of grade level revealed three major strands of information. First of all, that the number of responses given for each factor increased with grade level. Second, that the Grade 6 students (5) spoke only to three themes (i.e., the assignment, the future, inter-personal development). Lastly, that nine of the 14 responses made by the Grade 8 students emphasized the importance of grades.
Another question designed to address the issue of student motivation was the following, “What is your goal?” Nineteen individual responses and six factors emerged from the analysis. Regarding the factors, three related to academic goals such as to pass, to achieve a particular provincial standard, or to complete assignment accurately, and three related to such psychological goals as to get along with others, the drive towards excellence, or to achieve one’s personal best.

Fourteen females and ten males responded to the question. Of the 14 female responses, half (7) were made by Grade 7 students. Regarding the nature of their responses, females tended to be more specific in their goals than males. Whereas the female respondents focused on achieving at or above the provincial standard (i.e., Level 3), or understanding and completing the task at hand, the male respondents expressed an interest in remaining on task or generally doing well on the assignment. Thus, females tended to be more specific in their goal-statements.

Six regular ability, ten gifted, and three learning disabled students responded to the question. Of the 19 responses, seven stressed the importance of the task at hand and five focused on the highest levels (i.e., Levels 3 and 4) of the provincial achievement grid. Whereas only gifted (3) and learning disabled students (2) mentioned the provincial levels as their goal, only regular ability students (3) said that their goal was to do well. Thus, for this question, it would appear that gifted and learning disabled students had more specific goals than regular students.

The analysis from the perspective of grade level revealed three major strands of information. First of all, that the goals of the Grade 6 students (6) tended to focus on the assignment. Second, that the goals of the intermediate students (i.e., Grades 7 and 8) tended to focus almost exclusively on the highest levels (i.e., Levels 3 and 4 of the provincial). Lastly, that, compared to the other two grade levels, the number of responses made by the Grade 8 students was quite restricted. Thus, as high school approaches, it would appear that intermediate students tend to express goal statements which reflect provincial standards.

Asked to explain what they did when a problem or difficulty was encountered during the assignment four factors emerged from the analysis of the ten students who talked on this issue. The students either 1) sought help, 2) persevered, 3) did nothing, or 4) thought about the assignment in greater depth.

Six females and four males responded to the question. An analysis of the data revealed no differences between the genders.

There were four, three, and three responses to the question from regular ability gifted, and learning disabled students respectively. Of the total number of responses (10), it is noteworthy that half of the respondents said that they sought help, primarily from teachers, when they encountered difficulty. When faced with difficulty, a female Grade 6 student said, “I tried my best.” The learning disabled and gifted students, in addition to seeking help, thought about the task again or persevered. In spite of the recent emphasis placed upon cooperative and group learning in the last decade, this finding may highlight, once again, the dominant role of teachers as “sages on the stage” instead of “guides on the side” in a classroom environment.
Planning

Our participants overwhelmingly attempted to faithfully follow their teacher's task demands. Nevertheless, more female participants expressed some sense of transfer, a "I do it to learn" and more real life applications while the older grade 8 students made more bridging statements to the real world. No planning strategy was dominant for any of the participants. An equal number of general and specific planning strategies were evoked. As to the reasons that motivated the planning of our participants, our female participants evoked more personal self-esteem issues, the gifted participants aspired to excellence and the older grade 8 students expressed a more focused future orientation.

Findings

The first planning question, What do you think are the reasons why your teacher is asking you to do this assignment? probing the comprehension of the teacher's task demand received twenty seven responses. Nine factors were collated: task specific, learning orientation, academic evaluation, academic preparation, work habits, grade focus, real world preparation, real world applications, and finally plainly helping us, the researchers. The most evoked responses of these young adolescents were related to the task at hand, i.e., 10 out of 27 responses. A sample of their comments were “because it’s history period”, or “we’re doing algebra” or “integers” or “probability” or “it’s a listening activity”.

Relative to gender, the majority of the male and female responses were also task related. Nevertheless, more female participants expressed some sense of transfer, “I do it to learn” (10 to 5) and bridged to more real life applications (6 to 1) as illustrated in the following quote “to get the facts straight because what people write about history isn’t always right”.

Our gifted participants planned the task either relative to the task at hand, no transfer “in sight” or with real world application concerns. Out of the nine responses of L.D. students, two sought to improve their skills, one planned to improve her grades, two prepared themselves academically and one for the real world.

From a grade level focus, it was mostly grade 7 and grade 8 students who evoked reasons attached to the assigned activity (20 out of 27 statements). Not surprisingly, it was the grade 8 students who in the Ontario system are likely to transfer to a high school that made bridging statements to the real world.

Seventeen responses were given by the participants to the question, “How are you going to do this assignment?”. A general plan was put forward by seven students while seven others provided a specific plan. Both male and female students, in equal numbers, used general and specific planning strategies. Otherwise, complying with the teacher’s instruction, a third and last strategy was expressed only by female participants, and this in three cases. One gifted female grade 7 student said: “Our teacher told us the rule... And I followed it.” An equal number of ability level and grade level students used a general plan such as “thinking about it”, “writing down stuff”, or “typing it on the computer”. As well, an equal number of these students chose a specific plan based on a task analysis or on a step by step procedure.
Why do you plan to work at ___?

Probing the achievement level expectations of our participants with regards to the activities obtained 28 responses. Six factors reflected the expectations of our participants: modulated effort, personal intentions, drive to excellence, external reference, focus on grades and academic future. Almost half, i.e., 12 responses expressed personal expectations of self-esteem ("It's the kind of person I am..."), confidence ("It makes me feel confident"), self-evaluation ("I know I won't get every answer right") pleasing others ("It makes people around me, my parents, happy"), or pressure ("I feel pressure to do well"). These personal motives associated with self esteem issues and outside pressure came mostly from female participants (9 out of 12). Interestingly, only boys talked about adjusting their effort level. One grade six male said: "I don’t want to overwork, but I don’t want to do nothing". Another boy, this time a grade 8 student, said: "I don’t want my brain to work too hard, but I don’t want to be lazy". While effort exerted was only evoked by boys, academic future was expressed only by girls and in two instances.

Relative to the ability level of our participants it was not a focus on grades that differentiated the groups. What did, i.e., 3 out of 5 responses, was the motive of drive to excellence emanating from the gifted students. One gifted grade 8 student said "It’s probably the best I can do" and another gifted grade 8 responded "I like to go a little beyond the standard". Regular students seemed somewhat to be more externally focused, either towards the standards of achievement (provincial in this case) or to the demands of the task.

From grade 6 to grade 8, we obtained twice the number of responses (6 in grade 6 and 12 in grade 8). In other words, it seems that more the students advance in grade, the more they plan ahead. It was the grade 8 participants who displayed the most focused intent, either excellence, grades, or the future, while the grade 7 students evoked a multitude of present and personal expectations.

There were 11 responses to Question A13, "Why do you think that you worked/did not work at Level ____?" All of the responses, regardless of gender, ability, or grade level indicated that the participants would be more confident in their level choices in the future. As one female learning disabled Grade 6 student observed, "I would be more confident in the future because I’ve been through it once, I know what to do."

Self-Evaluation

Self-evaluation was gauged on the degree of help anticipated or sought during the activity and the degree of confidence felt about the outcome of the activity. Resources were equally balanced between needing more or less help suggesting that the students in general, whatever their ability, either underestimated or overestimated their capacity to do the work. Females both before and after the task perceived they needed more help and grade 7 students more than grades 6 and 8.

Confidence-wise, males were more domain-specific while females perceived a more global sense of confidence. When compared with L.D. and regular students, gifted students reported a middle
of the road confidence level, a more realistic appraisal of the ability to carry out the assigned task. Compared with grade 6 and 8 students, grade 7 students felt very confident about the assigned task.

Findings

Under the themes of self-evaluation and co-evaluation, responses came from nine females and five males for a total of 14 students. There were two key points: 1) needed less help, and 2) needed more help. The female students by a ratio of six to one, perceived they needed more help than the males both before, as well as after, the task. As one female said: “I had to ask my friend about this question that didn’t make sense.” Responses were balanced for both genders for those who were autonomous. In general the students perceived the work was easier than expected, and judged the teacher’s presentation as clear.

(On a technical note for future research: Students might be asked why they felt they would or would not help and how much help might be needed with the task. This might facilitate more explicit answers for this theme.)

Of the 14 respondents, two gifted students, five learning disabled students, and seven regular students expressed a self-assessment statement. Under the two categories, responses were equally balanced between needing more or less help. This seemed to suggest that the students either underestimated or overestimated their capacity to do the task. One learning disabled female commented, “I need help because I’m not good in math.” There appeared to be little difference across ability levels in responses to this question.

Four grade 6, six grade 7, and four grade 8 students responded to the help questions. All grade 7 students said they needed more help with the task than anticipated. The grade 6 and 8 students perceived that the task was easier than they thought and thus, felt they need less help.

Twenty-six students responded to the question on how confident they were in carrying out the assigned task. Three levels ranging from “a little confident,” “confident” to “very confident” were identified.

Fifteen females and 11 males talked about their confidence level and no general differences emerged in the “little confident” and “very confident” levels. However, under the “confident” level, the females appeared to have a general sense of confidence, basing their conclusions on thoughts such as “I know what it is about,” or “I’ve done it before.” The males on the other hand, gave more specific reasons for their confidence, relating this to the specific class lesson or subject area. Their confidence appeared more domain specific, whereas the female respondents perceived a more global sense of confidence. As well, of the nine responses in the “very confident” level, the males identified a clearer sense of performance than the females. As one male said: “If I just set my mind to it, I can do it” (clearly no metacognition was involved).

Eight gifted students, six learning disabled students, and 12 regular students reported on their confidence level. The majority of students, i.e., 14 of them, reported a middle of the road confidence level, with one half of these being the gifted students. Seven out of the eight gifted
Students reported confidence in carrying out the lesson. It appeared that on the whole, the gifted students seemed to have the most realistic appraisal of their ability to carry out the assigned class task. The majority of the regular and learning disabled students reported feeling “very confident” about the task without giving specific reasons for this perception. One learning disabled student summarized his feeling of confidence: “I have no reason, I just feel it.”

Eight grade 6, seven grade 7, and 11 grade 8 students reported on their perceptions of confidence before completing the classroom task. The majority of responses across the three grades were in the “confident” and “very confident” levels. Both grade 6 and 8 students based their responses on 1) past performance, 2) strength in the specific domain, and 3) a general sense of confidence in ability. It is interesting to note that only grade 8 students linked their level of confidence to group support and the importance of peers in the learning process. On the other hand, grade 7 students perceived being “very confident” more frequently than the other two grades. These responses were based primarily on past performance as related to the class task. It may be that they had strong successes in similar previous work or that these students had unrealistic beliefs about their ability. Further analysis of the research data may shed more light on this issue. Questioned after the activity on their expected level of confidence, if they had to do an assignment like the one they did, 10 out of 11 responses were optimistic. No gender, ability or grade effects appear. What nevertheless transpires for our participants confirms the richness of the experience. One grade 6 learning disabled female said “I’ve been through it once, I know what to do.” Another, a grade 8 learning disabled learned a new strategy: “I’d make sure I read over the notes and get ready for it.”

Implications

What we have learned as most revealing in this study relates to the fact that the participants express themselves more spontaneously before than after doing an academic task. After having done the task they are more reluctant to talk about their affective and cognitive beliefs relative to the task at hand.

A second significant implication, a regret on our part, stems from our methodological strategy of probing the process before and after the self-regulation process. For example, planning does not just occur in the early phase of task but can be an ongoing process. We must find a way of tapping different moments in the process of self-regulation.

References


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