Center on Innovations in Learning

Wise Ways®

Core Function: Personalized Learning: Motivational Competency

Effective Practice: Promoting a growth mindset, stretching students' interests, connecting learning to student aspirations, and differentiating instruction to enhance students' engagement and persistence with learning

Indicator: All teachers encourage self-direction by giving students choice in the selection of topics and the application of learning strategies. (E8)

Explanation: Self-directed learning is the practice of giving students choice in or control over their learning activities and/or learning materials. Allowing students to have choice of topic has been shown to improve student motivation. Giving students choice in selecting learning strategies can be effective under certain conditions: Students must be taught to self-evaluate their performance in the context of learning strategies, identifying those strategies that produce better learning outcomes. This allows the students to apply effective strategies going forward.

Questions: Why is student choice important? How should student choice of topics be included in the classroom? How should student choice of learning strategies be included in the classroom?

Why is student choice important and how can it be incorporated in the classroom?

Giving students choice in or control over their learning activities and/or learning materials helps promote student-directed learning. Often touted as allowing students to "take responsibility for their learning" (Checkley, 1995), proponents of student-directed learning believe that this practice increases student motivation, learning and engagement (Gambrell, 1996; Malone & Lepper, 1987). According to Turner (1995), opportunities for choice promote students' independence and versatility. Environments that provide choices and self-direction support students' feelings of autonomy and task engagement increases when students are provided with opportunities to make choices about their learning (Deci & Ryan, 1985). Research has demonstrated that students who are offered a choice of topic or activity will show more enjoyment of and greater persistence (e.g., Ayeroff & Abelson, 1976; Langer & Rodin, 1976; Perlmuter & Monty, 1977; Zuckerman, Porac, Lathin, Smith, & Deci, 1978). Further, students who were offered choice over aspects of the learning tasks that were incidental to instruction (e.g., topic) showed greater increases in motivation (Cordova & Lepper, 1996).

In addition, a meta-analysis of 41 studies revealed a strong link between providing students with choices and their intrinsic motivation, task performance, and their willingness to accept increasingly challenging tasks (Patall, Cooper, & Robinson, 2008, as cited in Goodwin, 2010). Too many choices, however, produced diminishing returns (e.g., giving more than five options was less effective than giving three to five). Research shows that fewer choices should be offered to less experienced/younger students, while older/more advanced students can be offered more options, with transitions to more choices occurring gradually (Guthrie, Wigfield, & Perencevich, 2004, as cited in Goodwin, 2010). Incorporating project-based learning into the classroom is one way to help promote student choice and student-directed learning. Project-based learning (PBL) has been shown to be linked to a variety of positive learning outcomes, including achievement, content knowledge, attitudes, motivation, and critical thinking skills (Condliffe, 2016; Kokotsaki, Menzie, & Wiggins 2016). Students can provide input as to their roles on teams, tasks, resources, questions, and final products; however teachers in many cases may need to provide "driving questions" to help structure projects (Condliffe, 2016).

How should student choice of learning strategies be included in the classroom?

Three categories of metacognitive learning strategies have been shown to improve student learning outcomes (Donker, De Boer, Kostons, Dignath-Van Ewijk, & Van der Werf, 2014; Schraw & Dennison, 1994). They are planning strategies (see Allen & Hancock, 2008), monitoring strategies (see Pennequin, Sorel, Nanty & Fontaine, 2010) and evaluation strategies (see Kramarski & Gutman, 2006). Evaluation strategies serve a two-fold purpose in that they allow the learner not only to analyze her current performance, but they also serve to help the learner assess the effectiveness of the learning methods themselves. Thus evaluation strategies, in particular, help the learner to determine which strategies during that performance improved her results and which strategies are likely to help future performance.

Strategy use does not emerge organically without direction instruction, so students cannot be expected to make choices about the application of learning strategies unless they have been taught how to do so. In order to learn how to choose from among problem-solving strategies, students need to see evidence that the strategies they are learning really do lead to improved performance (see Pressley, Levin & Ghatala, 1984; Pressley, Levin & Ghatala, 1988; Pressley, Ross, Levin & Ghatala, 1984). In short, it is through experience that learners come to predict the utility of different learning strategies under different conditions.

Teacher modeling of strategies is key to teaching those strategies (Pressley & Harris, 1990). This instruction must include not only the strategies themselves, but also how to choose the most effective strategies to solve problems. Pressley & Harris (2006) recommend that teachers model: 1) why the strategy is used, by providing specific reasons for the strategy selection; 2) how the strategy is used, by providing explicit instruction absent of ambiguity; and 3) what strategies to select in specific situations, by selecting the appropriate strategy to match the situation.

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