

Reflection: Windows into students' minds

Overview

Reflection, in its simplest form can be defined as, "the act of seeing one's own work" (Sunstein, 2000, p. 8). When students reflect on their own work, they are metacognitively analyzing various aspects of their learning. Some of these learning aspects may include reflecting on the processes used to complete work; to plan the processes required; to evaluate the success or failure of the process and product; to attain a personal goal; or to retrace the use of strategies (Graves, 1992; Zimmerman, 1986; Black, 2000; Schunk, 1986; Sunstein, 2000). Reflection becomes a window into students' thoughts and processes which often can go unnoticed if only a product is focused on by the teacher or other peers. These windows are key in a socio-constructivist classroom where learning from peers is a critical part of competency development. Students need to understand *how* others learn in order to mimic, or adjust according to their own processes. And for teachers who want to see the entire portrait of a student's learning, reflection brings this portrait into sharp focus.

The development of reflection

If reflection is the window into students' thoughts, then one of the main preoccupations in a learning situation is *how* to open up these windows. As in any conventional building, windows do not open on their own, they require some assistance. In other words, researchers have noted that reflection is socially constructed and develops through observation and practice (Schunk, 1986; Sunstein, 2000; Zimmerman, 1986).

Reflective language

Reflective language is the *interaction* that takes place through communication, be it verbal, written or through other symbol systems learned and understood in specific social contexts (Black, 1999). One component of this symbol system is the reflective language used in a school context. When students first begin to reflect on their work, the language they use is often a label or a feeling such as *good*, or *because I liked it*. Tierney et al. (1998) noted the development of reflective language is demonstrated through the quantity and breadth of comments. In fact, in their study of writing portfolios, the researchers noted student reflective communication developed in five main ways:

1. number of comments increased
2. comments focused on more specific aspects of the task
3. comments became more focused on both personal and community expectations
4. students began to notice growth through comparisons with previous work
5. students' increased ability to evaluate their performance

All this being said, since the language we use is socially constructed, as *texting* and *emailing* have recently demonstrated, it would follow that the nature of learning the characteristics of reflective language would be socially constructed. The question is then, what is the role of the teacher in scaffolding student reflection and reflective language in the context of the POP/EXPLO classroom?

Role of the teacher in the reflection process

The role of the teacher is to provide a supportive role, when it is required, in a student's acquisition of reflective language. This role may take on many forms:

- Make time for reflective moments in the classroom
- Build criteria for tasks so that students begin to incorporate this language into their own
- Model reflection be it as a teacher or provide time for classmates to share small reflections at various times
- Provide questions, prompts, graphic organizers to students who need guidance
- Make time for students to write their own reflection questions and then respond to them
- Vary the ways of reflecting to keep the process growing, and interesting
- Make it meaningful, allow students time to reflect early on in a task so that they can apply changes to their processes in time to be successful

Reflective activities can help students monitor their learning from various perspectives: understanding; skills/procedures/strategies; feelings; judgment/self-evaluation; goals/transfer of learning; and, attitudes. The teacher must have a purpose when asking reflective questions: Are you evaluating **for** learning? Is it part of your evaluation **of** learning? Reflections can help complete the evaluation portrait of the student by making the implicit explicit. Reflection in its simplest terms can be defined as a series of _____ . When students are reflecting on their work, they are _____ analyzing various aspects of their learning. This might include reflecting on aspects of the learning process such as: how the work was completed; _____; evaluating the success or failure of the process and/or product; and, assessing whether a personal goal was reached . Reflection is _____ and is one of the windows through which students permit us to see their learning and competency development. When students first begin to reflect on their work and learning, their language is usually about how they feel about their final product. As students use of reflective language progresses, their development is evident in several ways: the quantity of comments; comments focused more on _____; students begin to notice growth through comparisons with previous work; and, students' overall abilities to evaluate their total performance. The teacher's role is to provide _____ that will help students build reflective language and strategies by ensuring that new challenges are neither too difficult nor too easy. The teacher can guide but cannot reflect for the student. Students need to learn to communicate their _____ and thought processes. Students often know if their work is good but cannot explain why. Increasing students' ability to reflect is a key factor in successful learning. When we give students opportunities to talk about their learning, we expand their _____. Learning how to reflect occurs when self-regulated activities are built into classroom routines.

ongoing	act of seeing one's own work	personal and community expectations
self-monitoring activities	metacognitively	metacognitive thoughts
scaffolding	revisiting and assessing strategies	understanding of their own learning