

## **PUSHING THE BOUNDARIES IN MIDDLE SCHOOL**

*David Cuin*

Speaking as a freelance watercolorist and glass artist, one of the most rewarding aspects of collaborating with art students in school is to see them become enthused with an original project and to witness the broadening of their awareness of the links between art, business and other disciplines of study, which any collaborative project should illuminate. Over a period of six years, I have teamed with my local Middle School, 8<sup>th</sup> Grade advanced art class of Ann Simpson, art teacher and a talented artist in her own right, to create novel and compelling projects.

This project required each student to study the art of a culture they individually selected to identify typical motifs and how those motifs relate to the culture. Following short individual presentations of 24 cultures, the class, as a whole, voted for five cultures to include in the project—Aboriginal, Japanese, Egyptian, Scandinavian and Southwest Native American. The concept was to create a contemporary composition, using the motifs relevant to those cultures, in fused glass with metal inclusions and reverse embossing, both unusual fusing techniques.

Fused glass is a popular artistic medium these days but it is rare to see work with metal inclusions anywhere, let alone in schools, probably because the medium is unpredictable. Not only were the students required to adapt their designs to the constraints of this medium, but they also needed to explore some of the technology and difficulties that the artform presented. The use of color, a very typical aspect of glass art, was ruled out, except in very small doses. It is important for students to realize that all mediums have their constraints and that this encourages ingenuity and creativity.

We split the class into five groups of five students to promote teamwork. Each student would produce an individual tile that presents as a complete work of art alone. All tiles of the group also needed to relate to each other (Fig. 1) and conform to the principles of design, especially unity, movement and balance. In addition, all team members together had to produce one facet of a pentagonal pyramid that would surmount the whole tile display (Fig. 2).

We taught the students to handle and cut glass safely and with a modicum of accuracy, each producing an experimental piece to explore potential problems, like bubbles, and the practicalities of using various wires and types of metal (Fig. 3). Parameters particular to metal inclusions and embossing were explained. To enhance the sense of unity, we required each tile to have a tooled copper accent adhered to the surface that would contribute to its design.

All along we made clear that the project was experimental as we modeled authentic artistic risk taking, for it was impossible to predict how the rather complex designs would fare in fusing. The one thing we knew was that air would be trapped and we all agreed that bubbles could be a part of that attraction. The questions remained though, where

would the bubbles appear and what would they be like? On a project like this, until the kiln is opened, all bets are off.

The teams embarked upon their final designs on paper (Fig. 4), which we required them to formally present for assessment. Along the way, each student had to produce a daily record sheet indicating what had been achieved on any given day, since time constraints were important. The record sheet was essential to monitor individual contributions to each group's efforts. Ann Simpson also designed a detailed, self-assessing rubric to assist in overall grading.

We envisioned a pentagonal display to exhibit the tiles and pyramid for which I drafted a design that was ably executed in the Tech. Ed. department by Mr. Brendan Hager. For the class, we related its design and construction to the need for all artists to present their work attractively, which requires the exercise of skills outside of art.

When the big day came to open the kiln on the first tiles submitted for fusing, we held our breath. We knew some would be successful and others less so, but hoped to avoid much in the way of disappointment—or repeated firings. The tiles, using a modified firing schedule, fused well with little distortion and no obtrusive bubbles (Fig. 5). There were only three in the first firing but we pointed out how every step forward increased our margin of confidence for fusing the remaining tiles.

As the work reached its final stages, all students became very excited to see their individual and group efforts coming together and enthusiasm ran high (Fig. 6). The completed display, approximately 24" high x 18" on a side, is shown in Figure 7; a successful conclusion to an original and creative collaborative project that resulted in a unique piece of multi-cultural art.