The Effect of Group Work on Student Motivation in the Art Classroom

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Introduction

The art classroom is an ideal environment for students to develop creativity, collaborate, and apply newfound knowledge in a tangible way. These skills can lead to benefits outside the art classroom. However, students’ motivation levels are variable, and they often lack confidence in their own abilities, leading them to disengage. Without intrinsic motivation to do art, they have difficulty persevering long enough to truly enhance their skills. Group projects, however, may be able to help bolster students’ motivation and confidence. This study explores whether group projects can increase students’ intrinsic motivation to do art, as opposed to solo projects where they receive less input from their peers.

Research Question:
• Can group work influence art students’ intrinsic motivation to create art?

Rationale

- Thuketana and Westhof (2018) found that when less confident students were grouped with more confident students in an art class, their motivation to do art increased.
- Wahed and Husain (2019) found that students were more motivated to do art after collaborating with a guest artist. They gained knowledge that helped them explore their own ideas.
- Bowen and Kisida (2019) found that students with access to arts programs demonstrate better behavioral issues, and heightened empathy for others.
- Rosen-O’Leary and Thompson (2019) found that arts integration can support student growth in STEM classes, namely the ability to retain information.

These studies all emphasize the essential nature of arts classes and the importance of building student motivation within art classes.

Methods

Participants
Data was collected at an urban middle school with 677 students. Data from 33 art students was collected: 19 male and 14 female.

Data was collected from one 6th grade class, one 7th grade class, and one 8th grade class.

Procedures
The study lasted from January 8th, 2020 to March 14th, 2020. During this time, each class (6th, 7th, and 8th) completed two solo projects and two group projects, each with varying timespans.

Solo activities included small paintings, clay sculpting, and portrait drawing.

Group activities included gesture drawing, collage, and large-scale painting.

Instruments
The Intrinsic Motivation Inventory (IMI) was used to determine students’ levels of intrinsic motivation after each project was completed.

During data collection, students answered eight prompts from Deci and Ryan’s 22-question motivation survey to determine their intrinsic motivation, entering a number between 1 and 7 to indicate how much they agreed with the prompts. The mean scores for independent and group tasks were then calculated.

Table 1
Mean Scores for Independent and Group Tasks

<table>
<thead>
<tr>
<th></th>
<th>8th Grade</th>
<th>7th Grade</th>
<th>8th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>4.472</td>
<td>5.108</td>
<td>5.059</td>
</tr>
<tr>
<td>Group</td>
<td>4.592</td>
<td>4.458</td>
<td>4.925</td>
</tr>
</tbody>
</table>

Table 2
Independent vs. Group Mean Statistics

<table>
<thead>
<tr>
<th></th>
<th>t-value</th>
<th>p-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th Grade</td>
<td>1.345052</td>
<td>.19366</td>
<td>Not significant at p&lt;0.5</td>
</tr>
<tr>
<td>7th Grade</td>
<td>-0.929302</td>
<td>.37992</td>
<td>Not significant at p&lt;0.5</td>
</tr>
<tr>
<td>6th Grade</td>
<td>-0.346991</td>
<td>.73241</td>
<td>Not significant at p&lt;0.5</td>
</tr>
</tbody>
</table>

Table 3
Grade Comparisons

<table>
<thead>
<tr>
<th></th>
<th>f-ratio value</th>
<th>p-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>2.04746</td>
<td>.139745</td>
<td>Not significant at p&lt;0.5</td>
</tr>
<tr>
<td>Group</td>
<td>0.67256</td>
<td>.514957</td>
<td>Not significant at p&lt;0.5</td>
</tr>
</tbody>
</table>

Data

Upon coding of data from Deci and Ryan’s interview, several themes emerged. There was no significant difference between group and individual intrinsic motivation either within the grades or across the grades. Also, the mean response to the survey questions fell between 4 and 5 on a 7-point scale, regardless of grade and regardless of the nature of the project. This means that the students who completed the survey generally found the tasks enjoyable and interesting, though there were always students who fell on both extremes of the scale.

Discussion

Analysis of the answers to the IMI revealed no statistically significant difference between students’ intrinsic motivation to do group projects and their intrinsic motivation to do solo projects. Additionally, there was no difference in student motivation across the three grades. The inconclusive results of this study may have resulted from a few factors. Students’ motivation levels may have depended more on the medium of the project than its group/solo nature. This may be especially true in situations where students were given the opportunity to choose between different media. Choice and voice may have influenced motivation more dramatically than group/solo work.

It is recommended that art teachers implement both group and solo activities in their classrooms, since students responded equally well to both types of projects. Teachers should also allow students choice and voice, giving them the opportunity to experiment with a wide range of materials and work with desired group members.