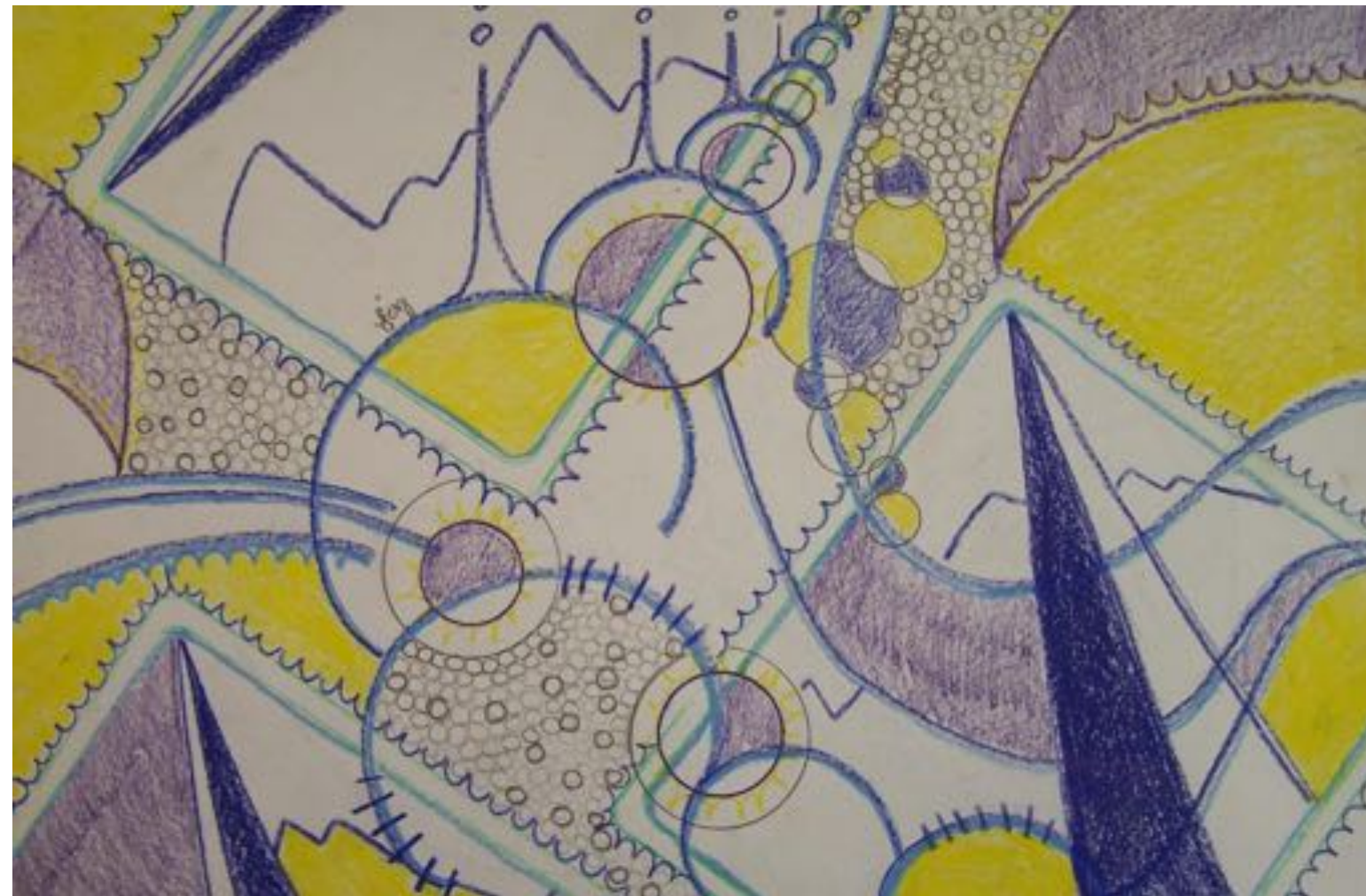


The Influence of Problem-Based Learning on Drawing Ability

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Abstract

Learning skill in visual arts has been positively associated with problem-based-learning (PBL). Although researchers theorize that PBL engages students to increase learning, many visual arts instructors continue to use skill-based learning (SBL) in their classrooms.



Problem

It is not known the extent to which **problem-based learning** (PBL) or **skill-based learning** (SBL) in art education increases drawing ability for 7th grade students (Lam & Kember, 2004).

This problem has negatively impacted visual art students because a higher quality of learning may be present (Beach, 2007; Boud, 1985; Cerezo, 2004; Eilouti, 2007; Smith, 2008). A possible cause of this problem was a lack of research (Kozbelt, 2002; Kozbelt & Seeley, 2007).



Purpose

The purpose of this study was to address the differences in Clark's Drawing Abilities Test (CDAT) scores between 7th grade visual art students taught through the framework of PBL and those taught through SBL.

Relevant Literature

Conceptual Framework

•The conceptual basis for this study was PBL, which originates from a problem a student desires to solve (Boud & Feletti, 1997).

Research on PBL

- PBL was used to study effective training for future professionals (Boud & Feletti, 1997; Delisle, 1997).
- Students taught through PBL are better at integrating knowledge, being resourceful, and interpreting and evaluating objectively (Semra, Ceren, & Omer, 2006).
- Students taught through PBL are self-regulating and take ownership of their learning (Semra & Ceren, 2006).



Research Questions

To what extent are there differences in scores, if any, on Clark's Drawing Abilities Test (CDAT) between, 7th grade visual-art students taught through the framework of PBL and those taught through SBL?

Procedures

Design

•A quasi-experimental study with a nonequivalent external control group, pretest-posttest design.

Sample

•Art students taught through PBL ($n = 26$) or through SBL ($n = 55$).

Instrumentation

•Clark's Drawing Abilities Test (CDAT)

Procedure

Students were taught either through PBL or SBL . Administrators signed a data use agreement approved by Walden IRB. Pretest and posttest CDAT assessments were scored by Clark's Publishing, Inc.. The dependent variable was CDAT and the independent variables were PBL and SBL.

Data Analysis

Reliability and validity measures were obtained by enlisting experts at CDAT Publishers assess content.

Data analysis consisted of a *t*-test.

Findings

Results were inconclusive due perhaps to resentful demoralization as a reactivity threat to construct validity.



Limitations

Design of study lacks internal and external validity, and construct validity.

Validity and reliability of study design lacks tested criteria in PBL for 7th grade visual art students.

Conclusions

This study demonstrates the need for further validation of research designs using comparative teaching styles and drawing tests.

The implications of the inconclusive findings suggest negative effects high stakes testing can have on students of special needs.



Social Change Implications

This study provides insights into the ways that teaching drawing promotes an understanding of visual art concepts of interest to students, parents, faculty, administration, institutions, and the visual art education profession.

Positive social change includes promoting skill development in problem finding and problem solving, decision making, critical thinking, and using artistic expressive properties.

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