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## Peer and Self Reflective Evaluations; Benefits and Techniques Used in a Middle School Art Room Setting

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PEER AND SELF REFLECTIVE EVALUATIONS; BENEFITS AND TECHNIQUES  
USED IN A MIDDLE SCHOOL ART ROOM SETTING

by

Mary Garrod

A thesis submitted to the Graduate College  
in partial fulfillment of the requirements  
for the degree of Master of Arts  
Frostic School of Art  
Western Michigan University  
April 2018

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# PEER AND SELF REFLECTIVE EVALUATIONS; BENEFITS AND TECHNIQUES USED IN A MIDDLE SCHOOL ART ROOM SETTING

Mary Garrod, M.A.

Western Michigan University, 2018

Students' intentional development as independent learners is increased with the understanding of self efficacy, which contributes to motivation, persistence for learning, and future achievements. However, adolescence is a time when self efficacy and motivation in art often decline. Two effective teaching and learning practices that can aid middle school art educators in the development of adolescent student judgment skills and confidence as independent learners, are self assessment and peer assessment. This paper presents literature on the topics of peer assessment, self assessment, and their link to self efficacy beliefs in adolescents. It then provides applicable, research-based self and peer evaluation techniques for facilitating students' motivations within the context of the middle school art room, and discussion of benefits with the purpose of shining a light on the positive results of peer and self reflective evaluations, therefore validating the use of a variety of evaluation techniques in the middle school art classroom. The study results also help determine and document which techniques best increase students' positive mindsets, confidence, independence, and motivation in the art classroom in order to break the negative mindset of so many young artists, and provide useful information and insights for other middle school art educators.

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Mary Garrod

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## INTRODUCTION

The literature suggests that in order for students to achieve their optimum educational success both in higher education programs and future professional lives, they need intentional development as independent learners. The ability to make improvements, by continuously assessing the quality of their work in real time, is a part of this preparation for a future as an independent learner (Thomas, Martin, & Pleasants, 2011). These skills to self monitor, self judge, and self edit/revise may be cultivated through a student's educational journey to prepare them for lifelong learning as an active member of society. Brewer (1991) says, "this starts at the middle school level, when student are interested in technical concerns, scientific wonders, and how things work" (as cited in Stokrocki, 2007, p. 15). However, adolescence can be a rocky time for many middle schoolers. Students are learning how to balance new hormonal changes, increased academic rigor, views on body image, and decisions about self concepts. Middle school adolescents are overwhelmed with new educational and social responsibilities, yet still linger in the gray area between childish indulgence and adult responsibility, essentially suspended on the cusp of adulthood for years (Simmons, 2001). Whether as controversial imagery or confrontational behavior, these conflicts often arise visibly in the art room and may lead frustrated students to feign apathy because art is not "cool" enough, lack motivation and effort because of artistic self doubt or pressure to focus on academics or sports, or simply quit art all together (Simmons, 2001). All of this adversity can make the middle school art room an exhausting, difficult place to teach. Nevertheless, successful art teachers are resilient. Wolf (1997) acknowledges that strong art teachers are able to use these challenges to "capitalize on the energy of adolescents to make art an opportunity for many to achieve a sense of mastery and self-respect" (as cited in Simmons, 2001, p. 18). In order to do this, art educators need practical

and accessible teaching techniques, tools, and examples that will easily translate into their middle school classrooms (Stokrocki, 2007).

Two effective teaching and learning practices that can aid middle school art educators in the development of adolescent student judgment skills and confidence as independent learners, are self assessment and peer assessment. A third effective strategy, the use of portfolios in the art classroom, is worthy of its own extensive research and discussion, and will not be discussed in this paper. According to Boud (1991), a defining characteristic of self assessment is “the involvement of students in identifying standards and/or criteria to apply to their work and making judgments about the extent to which they have met these criteria and standards” (as cited in Boud, 1995, p. 12). The term self evaluation is frequently used throughout the literature synonymously with self assessment. Some authors have tried to distinguish between self assessment and self evaluation (for example, MacGregor [1993] suggests self evaluation implies self assessment with no component of grading), yet this other usage does not indicate a systematic difference, therefore the phrase self evaluation is commonly used and accepted (Boud, 1995). Whether self assessment or self evaluation language is preferred, Boud (1995) is adamant that it “is not something to be added to the repertoire of teaching activities, it is a matter which needs to be taken into account in all considerations of learning” (p. 9).

According to Falchikov (2007) peer assessment is a process in which students “provide either feedback or grades (or both) to their peers on a product, process, or performance, based on the criteria of excellence” (as cited in Thomas et al., p. 3). Whatever peer assessment approach is used, Falchikov (2007) and Thomas et al. (2011) express that students need to be allowed to practice making reasonable judgments about their peers’ work and the degree of success in comparison to mastery expectations.

Boud (1995) says peer and self assessment occur “within a particular context, with respect to particular domains of knowledge and with particular goals in mind” (p. 15). Yet, both self and peer assessment processes have a broad educational reach and students may be involved in a diverse group of activities interpreting evidence from themselves and others (Boud, 1995). Some activities are informal, and simply used for students’ personal learning benefit, other activities might involve peers or teachers as part of a discussion element, and still other activities could be used formally as part of an assessment system incorporating other student data. All varieties of peer and self assessment application are used in hopes of increasing the value students place on their own learning and achievements (Boud, 1995). Boud (1995) recognizes that peer and self assessment “commonly portrayed as [techniques] to enhance learning, [are] more transformative, elusive and confronting to conventional teaching than it is normally expedient to recognize” (p. 1). Reflecting, learning, and adapting from experiences through self and peer evaluations can have a dramatic effect on student participation, confidence, and motivation in the art room by raising student self efficacy beliefs; that is, “people’s belief in their capabilities to produce desired effects by their actions” (Bandura, 1997, p. vii). Broadfoot (1979), arguing from the context of schooling, suggests that one reason for a lack of motivation in students is that the almost completely one-sided nature of most assessments does not reflect the fundamental interactive basis needed in learning, leaving students alienated by their previous experiences with the assessment process. She suggests that increased student involvement in the assessment process, particularly through self and peer assessment, acknowledges and develops the shared responsibility of both teacher and student in the learning process, and helps to relieve students’ feelings of alienation through mutual evaluation (Broadfoot, 1979). Boud (1995) agrees that enhancement of student morale involvement and therefore motivation, is created by

providing students with an awareness that their opinions are being considered, which supports a good self concept. Students may come to have a better self concept, including higher self efficacy beliefs when they are encouraged through assessment activities to think positively about their learning. This positivity helps students view their individual progress, however small, in light of their previous accomplishments (rather than only in relation to others), so that whatever amount of progress they do make can be acknowledged and celebrated by both student and teacher, ultimately guiding students to see the value in what they are creating and consequently take more responsibility for their own learning (Boud, 1995; Broadfoot, 1979).

Boud (1995) summarizes his thoughts by stating, “All acts of assessment, whether by teachers, subject matter experts, peers or the individual learner, involve these two stages: establishing criteria and judging work in the light of them” (p.12). It is necessary to equip learners with the skills to make complex judgments about their own work and the work of others, including preparation for making decisions in future uncertain and unpredictable circumstances (Boud & Falchikov, 2006). Self and peer evaluations have the ability to prepare students for lifelong learning. This paper attempts to address this topic first by reviewing selected literature published on self assessment, peer assessment, and their link to self efficacy beliefs. Then in the following sections provide applicable self and peer evaluation techniques and discussion on benefits when applied in a middle level (7th-8th grade) art room setting. The purpose of my study is to shine a light on the positive results of peer and self reflective evaluations and validate the use of a variety of evaluation techniques in the middle school art classroom. There seems to be little scholarly research on how peer and self assessments can specifically help middle school *art* students, but by studying and implementing various techniques I will be able to help determine which techniques best increase students' positive mindsets, confidence, independence,

and motivation in the art classroom. Conducting this study also documents how peer and self assessment techniques can break that young artist negative mindset, and provide useful information and insights for other middle school art educators.

## SELF ASSESSMENT

### **What is Self Assessment?**

Self assessment is defined by McMillan and Hearn (2008) as a “process by which students 1) monitor and evaluate the quality of their thinking and behavior when learning and 2) identify strategies that improve their understanding and skills” (p. 40). They continue to explain self assessment as judgments of students’ own work with the intention of improving performance by identifying discrepancies between current and desired performance, as well as identifying further learning targets in order to improve achievement (McMillan & Hearn, 2008). In Boud’s (1995) book, *Enhancing Student Learning Through Self Assessment*, he keenly explains the educational significance of implementing self assessment in order to enhance student learning, but also stresses “that it is important to develop self assessment skills because they are central to effective learning now and for future learning and an essential feature of professional practice for anyone who undertakes a responsible role in society” (p. 14). It is clear that Boud (1995) is passionate about the use of self assessment as more than a classroom activity, but as a tool for lifelong learners. Boud (1995) further explains that the use of self evaluation is based on the assumptions that (a) it is a necessary skill for lifelong learning; the ability to realistically evaluate their own work and to effectively oversee their own learning progress is important for all learners to develop; (b) it needs to be developed; research has shown that students overwhelmingly do not enter higher education with self assessment skills fully established, so it is appropriate to develop a range of self evaluation skills through different subjects in order to

cultivate skills at earlier stages of education; (c) it is necessary for effective learning; learners need to develop the capability of monitoring what they do and adjusting learning strategies appropriately for effective learning of any kind to take place. Effective learning also involves learners proactively seeking to guide their own learning rather than waiting for others to do so (Boud, 1995). Self assessment, when it is conducted in a context of openness and critical reflection, gives learners the opportunity to see themselves, their work, their performance, and the options which lay before them, in a radically different way (Boud, 1995).

Interestingly, self assessment is not exclusively considered a progressive educational approach. Boud (1995) claims self assessment may be widely used by any teachers or instructors who wish to allow increased flexibility for their students to engage profoundly with a given subject area. “Self assessment has great potential when it is seen from the point of view of contributing to student learning and when it is used to engage students more deeply in the subject areas being studied” (Boud, 1995, p. 23). Boud (1995) is not alone in his view that self evaluation is critical to enhancing student learning. McMillan and Hearn (2008) agree that when self assessment is correctly implemented it “empowers students to guide their own learning and internalize the criteria for judging success” (p. 40). This empowerment promotes a mastery goal mindset, genuine motivation, internally controlled effort, and overall a more meaningful learning experience (McMillan & Hearn, 2008). Boud and Falchikov (2007) insist that one of the core purposes of education is to “develop the capacity for students to make judgements about their own work” (as cited in Boud, Lawson, & Thompson, 2013, p. 941). Such self evaluation is needed in order to facilitate effective study, so that learners can digest and evaluate aspects of current work they need to improve, and enable learners to form skills they will need in any area of work in the future (Boud et al., 2013). Unfortunately, Boud and Falchikov (2006) note that

students frequently are not privy to how the process of assessment actually works. Too often assessment is a procedure students submit themselves to, rather than an experience they own. “If students are always attending to the judgements of others they may not acquire the broader set of skills that enable them to do this for themselves” (Boud & Falchikov, 2006, p. 403). McMillan and Hearn (2008) express that by utilizing self evaluation, students will be able to know when they are learning, and see what they have mastered and what needs further work- when they are successful or unsuccessful. Then students will be able to identify how much effort is needed for that success, and which learning strategies are useful during challenges. Furthermore, students who then connect their success to effort and perseverance rather than external attributions such as talent or outside assistance from others helps students build self efficacy for future performance in similar tasks (McMillan & Hearn, 2008). “Making these internal attributions is, in turn, based on the ability of students to self assess and evaluate” (McMillan & Hearn, 2008, p. 44).

### **Self Assessment Process**

Boud (1995) and McMillan and Hearn (2008) adequately describe the self assessment process, breaking it into three main components. The components are explained as being “related in a cyclical ongoing process: self monitoring, self evaluation, and identification and implementation of instructional correctives as needed” (McMillan & Hearn, 2008, p. 41). These three components of self assessment combine to provide students with critical skills that enhance student motivation and achievement. Essentially, McMillan and Hearn (2008) summarize the process as learners first identifying learning and performance strategies (self monitoring), then providing themselves with feedback (self judgment), and finally determining a plan to enhance or improve their performance (learning targets and instructional correctives).

**Self monitoring.** The first component of self assessment is self monitoring, which involves an awareness of thinking, actions, and progress *while* it is occurring. Learners who self monitor pay attention to what they are doing, and are concerned with pursuing the goals they have set for themselves, or the requirements of the given task (Boud, 1995; McMillan & Hearn, 2008). Boud (1995) describes self monitoring learners as students who independently seek out ideas and strategies from books, peers, and other sources to ensure they are on track for success.

**Self judgment.** The second component of the self assessment process is self judgment, which McMillan and Hearn (2008) state involves recognizing progress towards learning targets. Students need to make realistic and formative judgments of their performance in order to understand what they know and what they still need to learn in order to be ultimately successful (McMillan & Hearn, 2008). Adolescents who are taught to openly judge and evaluate their work, against appropriate criteria, are more likely to work through challenging tasks, have more confidence in their abilities, and hold themselves more accountable for their performance (McMillan & Hearn, 2008). Students who use self judgment check for themselves if they are proceeding in the desired direction and analyze the extent to which objectives have been met (Boud, 1995).

**Learning targets and instructional correctives.** According to McMillan and Hearn (2008) the third component of the self assessment process is identification and implementation of instructional correctives. Boud (1995) and McMillan and Hearn (2008) explain that during this component learners indicate any additional action needed to achieve their objectives, then choose subsequent learning goals. Ensuing goals are both to expand and extend learning targets and to address any aspects which were not accomplished sufficiently, such as partially correct answers or any misunderstandings. Once any appropriate instructional correctives are completed, students

then repeat the cycle as necessary by resuming self monitoring, followed by self judgment, and learning targets and instructional correctives (McMillan & Hearn, 2008).

### **Reflective Use of Self Assessment**

Boud (1995) lists several ways in which self assessment may be used in the classroom, including; for individual self monitoring and checking progress, where students monitor their own learning to make sure they are progressing towards their goals and meeting the expectations of the task, and as a way to promote good learning practices and learning-how-to-learn skills. Boud (1995) also includes uses as a substitute for other forms of assessment, as a learning activity designed to improve professional or academic practice, for diagnosis and remediation, to consolidate learning over a wide range of contexts, or to review achievements as a prelude to recognition of prior learning (such as portfolio development). Finally, Boud (1995) states that self assessment may be used for self knowledge and self understanding. In other words, self evaluation can allow learners to reflect on the nature of their particular experience in order to gain a deeper appreciation of influences on their learning (Boud, 1995). According to Boud (1995) this “contributes to the development of the person because, through it, students’ self knowledge and self understanding increase” (p. 20).

The development of reflective skills is an essential component of purposeful self assessment. Popovich (2006) agrees that “it is imperative that students have time and opportunity to reflect on content and processes” (p. 37). The connection between self evaluation and reflection is apparent. Self evaluation is a reflective activity which develops reflective skills and strengthens learning from experience when it is utilized well (Boud, 1995). Boud (1995) even offers that “indeed, the former can be regarded as a specific subset of the latter” (p. 34), that is, self evaluation is a subset of reflection. Boud (1995) continues by arguing that when teachers

consciously design their lessons and classes with awareness of the role of reflection in learning, self assessment activities may be included without needing to even label them as such. Boud (1995) explains that consideration of reflective self assessment can take place at any stage of the learning process. Before learning, students will reflect on what they know, what they do not know, what they want to know, and how much effort will be needed to reach their goals. During learning, students will be involved in making reflective judgments about whether or not they are meeting those goals and what strategies are needed to ensure that their learning proceeds in the direction desired. After learning, students assess which aspects to focus on to pursue their interests and reflect on how what they learned related to what they knew, wanted to know, and thought they knew (Boud, 1995). “By carrying out clearly defined reflective activities before, during, and after lessons, learning from experience can be enhanced” (Boud, 1995, p. 33). Boud (1995) further breaks down the reflective components of self assessment practices by describing Donald Schon’s (1987) theories of reflective practices, where Schon distinguishes between two aspects of self reflection, reflection-*in*-action and reflection-*on*-action. Reflection-*in*-action takes place while practicing, and “influences the moment-by-moment decisions which are made [by a learner], whereas reflection-*on*-action occurs after the event and contributes to the development of the skills which are needed in practice” (Boud, 1995, p. 33). Both reflection-*in*-action and reflection-*on*-action need to be developed as part of practice-oriented curriculum and are necessary elements of any class or lesson (Boud, 1995).

McMillan and Hearn (2008) agree that successful student self assessment in the classroom establishes “clear learning targets, defines evaluative criteria, provides tools for assessment, and allows time for reflection” (p. 45). This requires students to devote time to thoughtful reflection on what and how they are learning, and how to provide evidence to support

their evaluation (Stokrocki, 2007). Boud (1995) maintains that self evaluation is “as much concerned with planning learning and the questioning of existing learning practices as it is with recording achievements or checking understanding” (p. 20). Stokrocki (2007) acknowledges that using the assessment process is not easy, but she reassures that reflective evaluation skills lead to lifelong learning, “which is a process of developing questions about what students do not understand, and strategies for obtaining further assistance” (p. 17). According to Boud and Knights (1994) any learning activity includes features that are apt to grow students’ reflection skills including when:

- Learners are actively engaged with a task which they accept is for learning (they are not simply following a prescription or set of rules, but are contributing their own thinking to the task).
- The task is constructed to allow significant elements of choice by the learners so that they can begin to own it and make it meaningful and worthwhile for them - it is a task which is not undertaken simply to satisfy the needs of the teacher.
- The learning event is not totally predictable to the participants and learners are prompted to notice what they did not expect.
- Learners’ experience is challenged or confronted in some way which allows them to reassess their experience and the assumptions on which they are operating.
- Learners are obligated to intervene in some way in their own learning process; they have to make choices and follow the consequences of their choices.
- Learners are required to link what is new to them to their existing frameworks of understanding to confront the need to modify these frameworks. (as cited in Boud, 1995, p. 34)

Dochy, Segers, and Sluijsmans (1999) express that the assessment era promotes viewing learners as active participants who share responsibility, collaborate, reflect, and conduct continuous dialogue with their teacher. This rapport encourages authentic reflection through self evaluation practices, and allows teachers to conceptually take students beyond their present context (Boud, 1995). Students can therefore recognize and appreciate the influences on their learning and on the nature of their particular experience, and in these cases, Boud (1995) insists “self assessment is emancipatory” (p. 20). Boud (1995) recognizes that this sense of independence emboldens students to take responsibility and authority over their learning, rather than submitting their learning to the prescriptions of others, so that students may process and reflect on their learning and critically examine any ideas they meet. Boud and Falchikov (2006) assert that developing reflective skills by using self assessment practices must always have the goal that students themselves can learn to accurately evaluate for themselves what constitutes good work, and be given opportunity to practice this skill, in order to promote lifelong learning.

### **Self Assessment Cautions**

**Attachment of grades/marks.** Self grading or marking is a limited aspect of self assessment when used on its own. Boud (1995) reminds us that self assessment means more than students grading their own work; it means, “involving them in the processes of determining what is good work in any given situation” (p. 12). An overemphasis on the grading aspect of self evaluation can shift students’ attention away from the value in identifying and engaging with criteria (Boud, 1995). If self assessment is a worthwhile activity in its own right, why even consider using it for marking purposes? Boud (1995) explains that some students view assignments which are not graded as less serious than those that are, and therefore may be less willing to complete work which does not have a reward. Some students are even unwilling to

participate in self assessment exercises if they are not used for formal assessment purposes, despite seeing the value in a self evaluation exercise. Boud (1995) provides two arguments for students to be involved in self grading; (a) The reality argument and (b) based on expediency. Boud (1995) describes the reality argument as recognizing that self assessment always occurs in a context, and never in a vacuum. Sometimes the self assessment setting will be mild and a student's standards will be adequate; other times the setting may be complicated and students can lose their sense of what is expected. Students need to be able to assess themselves in a variety of situations and self marking provides practice in "the interpretation of the often arbitrary requirements which most public work needs to satisfy" (Boud, 1995, p. 168). Boud (1995) then explains the second argument of based on expediency as potentially saving teachers time on the often laborious task of grading. A teacher's time is valuable, and time used for grading is time not devoted to facilitating learning. In a classroom where student markings and teacher markings have proven to be consistent and comparable, student self grading can release teachers to devote their time to more educationally worthwhile activities. This also allows students to have the chance to reflect on their own work (Boud, 1995).

In Boud et al.'s (2013) study of student engagement in self assessment over time, they found that students are reasonable judges of their own grades, but that the accuracy of judgment varies depending on the level of the course and the expertise of the student: high achievers are more likely to underestimate grades, low achievers overestimate; "students in advanced courses are more likely to underestimate, students in introductory courses over-estimate" (p. 945). When incorporating grades or marks into self assessment practices it is important to take this information into consideration. Boud et al. (2013) also offer that it may be noticed that students' ability to accurately judge their work declines when they encounter new subjects or academic

areas. Their research does suggest that over time students can improve their ability to self judge both within a subject and across a range of subjects. However, stronger students are still found to underestimate their ability while weaker students over-estimated (Boud et al., 2013).

Boud (1995) makes it clear that student self assessment should either be viewed as a skill needing to be developed and restricted to a purely learning role, or it should be used in a way which recognizes the probability for bias and distortion, with controls and strategies in place to moderate student marks so that raw scores from students are not put directly into formal records. Boud (1995) suggests that self assessment for grading purposes is only appropriate when there is a high trust, high integrity learning environment. This environment includes: students who are rewarded for high integrity grading, grades are moderated so that departures from teacher marks are justified, peer and teacher checks take place, and criteria is clearly defined to avoid misinterpretation (Boud, 1995). Furthermore, the use of self assessment grading should promote the achievement of effective self assessment as its major goal, and provide a place where students have ample opportunity to practice and develop their skill (Boud, 1995).

**Practice is needed.** Students, especially adolescents, require an opportunity to practice any new skill. Dochy et al. (1999) assert that self assessment takes time, and support for students will be necessary during self assessment in order for students to become comfortable with techniques and ultimately become proficient. Boud (1995) adds that if the ability to self assess is regarded as important, then it needs to be purposefully pursued and “in the light of the features which have been identified as to how it might best be supported” (p. 22). Stokrocki (2007) suggests that teachers “provide opportunities for students to learn to pre-assess and post-assess their own learning, compare the results of their first assignment with a later one, problem solve and reflect collaboratively, evaluate their own artwork, draw pictures of and measure what they

learn, and provide suggestions about their works in the future” (p. 15). The Boud et al. (2013) study addresses the question of whether dedicating an extended period of time to student engagement in self assessment could calibrate judgment and help make students more effective judges of their own work. These results are important as they “support the notion that under appropriate conditions most students can improve their judgment skills” (Boud et al., 2013, p. 955). Their research results suggest that, although students may struggle at first to accurately use self assessment practices, students become more accurate with time and benchmarks scores as reference points (Boud et al., 2013). Also, Boud et al. (2013) discovered the accuracy of student judgment may lessen to some extent when confronted with new subject matter, and improve again with additional practice in more subjects, suggesting that an aspect of the ability to make judgments may also be domain specific. Boud et al.’s (2013) results provide support for a practice effect, showing that students can improve over time and become more effective judges of their own work through self assessment practice; that is, “with knowledge of standards and comparison of standards to their own work and direct authentic evaluative experience” (p. 953).

**Not exclusively summative.** “The view that the assessment of students’ achievements is solely something that happens at the end of a process of learning is no longer tenable” (Dochy et al., 1999, p. 332). The growing literature on formative assessment has implications for self assessment. According to McMillan and Hearn (2008) formative assessment can be defined as “employing appropriate activities to provide feedback to enhance student motivation and achievement *during* instruction- as students learn” (p. 42). Strijbos and Sluijsmans (2010) suggest that a conceptual shift has occurred in the practice of assessment in the last two decades, from a teacher directed assessment perspective to a student involvement assessment process, “a shift from a testing culture to an assessment culture” (p. 265). They explain that the main

function of an assessment in a testing culture is to calculate results for summative purposes, taking place at the end of a lesson or class to evaluate how well a student performed. Shortcomings of using summative assessments alone are that they are isolated from the learning process (Strijbos & Sluijsmans, 2010). In contrast, an assessment culture features both summative and formative purposes. The addition of formative assessment is an integral part of the learning process, particularly because students are actively involved in the assessment process which happens repeatedly *during* a course or lesson rather than only at the end (Strijbos & Sluijsmans, 2010). Dochy et al. (1999) affirm that self assessment can be used fairly easily for formative purposes, and students should learn to see formative self assessment practices as a tool for learning. Stokrocki (2007) agrees that educators can and should use everyday assessment of classroom learning because it provides students additional feedback on their learning beyond end of unit summative measurements and rubric rankings. McMillan and Hearn (2008) insist that self assessment is a valuable skill and essential to using feedback appropriately. Not solely providing feedback after instruction, but also formatively to provide helpful information *as* learning occurs.

## PEER ASSESSMENT

### **What is Peer Assessment?**

Peer assessment and feedback are activities which are commonly linked with self assessment and in the right circumstances can considerably enhance self assessment. Spiller (2012) simply describes peer assessment as, “students providing feedback to other students on the quality of their work” (p. 10). This action of providing feedback can have many variants, and may be implemented and used in a variety of ways, however the literature agrees that students learn by, “consistently making evaluations and relating these to the evaluations of others”

(Strijbos & Sluijsmans, 2010, p. 268). In other words, students learn by reflecting whether or not their judgments were correct, examining the reasons behind poor actions and ways to improve in the future, and actively considering what they have missed that others have seen (Boud et al., 2013; Gielen et al., 2010; Spiller, 2012; Strijbos & Sluijsmans, 2010). Strijbos and Sluijsmans (2010) insist that “such activities cannot be done in isolation” (p. 268). Making constructive judgments about work needs the input of others, and the development of evaluative expertise. In particular, input from teachers, tutors, professionals, and those who can tell if appropriate judgments about the quality of work are being made, including students’ peers (Strijbos & Sluijsmans, 2010). Spiller (2012) offers several reasons why input from others in the form of peer feedback is so beneficial. She proposes that peer evaluation and feedback encourage collaborative learning through conversations about what constitutes good work, and helps students guide each other to better understand the learning process and interpret gaps in their learning (Spiller, 2012). When students participate in commentary on others’ work it can also boost their own capacity for judgment and choices, enhancing the assessment process itself (Spiller, 2012). However, Gielen et al. (2010) advise that peer feedback should be:

- (a) sufficient in frequency and detail;
- (b) focused on students’ performance, on their learning, and on the actions under students’ control, rather than on the students themselves and/or personal characteristics;
- (c) timely in that it is received by students while it still matters and in time for application or for asking further assistance;
- (d) appropriate to the aim of the assignment and its criteria;
- (e) appropriate in relation to students’ conception of learning, of knowledge, and of the discourse of the discipline;
- (f) attended to, and;
- (g) acted upon. (p. 304)

Peer feedback can also be beneficial for learning, specifically, because it is different than teacher feedback (Gielen et al., 2010). It is this difference, that helps lessen the “power imbalance between teachers and students” (Spiller, 2012, p. 12), and enhances the students’ status in the learning process. Strijbos and Sluijsmans (2010) insist that “students perform better at using feedback from their peers rather than feedback by a subject matter expert” (p. 268). Boud (1995) maintains that learning is enhanced for students who are given more opportunities to discuss their work with other students. These conversations provide students the time and space to acknowledge any uncertainties without having to justify themselves to an authority figure (Boud, 1995). Allowing feedback to be student driven provides a setting for students to focus on the learning process, encourages students to clarify with one another, providing a chance for students to review and edit their ideas without expectational pressure from an instructor. Falchikov (1996) insists that peer feedback supports the learning process by providing an “intermediate check of the performance against criteria, accompanied by feedback on strengths, weaknesses and/or tips for improvement” (as cited in Gielen et al., 1999, p. 304). When this feedback is provided by peers, student learning is increased. Spiller (2012) also notes that immediate feedback is possible when utilizing peer assessment instead of teacher only feedback. Gielen et al. (2010) agree that peer feedback may lighten the formative assessment workload of teachers, by increasing the number of assessors and feedback opportunities, which in turn increases the frequency, extent, and speed of feedback. They do warn that the accuracy of feedback might be lower in comparison to teacher feedback, and Boud et al. (2013) suggests that students also learn when not to trust the judgments of other. Gielen et al. (2010) consider this a tolerable concession for increased student progress. Spiller (2012) reiterates that students who

receive a wider range of ideas and commentary about their work will benefit in development, improvement, and achievement.

### **Peer Assessment Cautions**

**Grading/marks attached to peer assessment.** Unfortunately, there are times when peer assessment may have the opposite effect, and student learning is not increased, but rather hindered. A common practice of using peer marking or grades during peer assessment is an example of when peer evaluation does not benefit the student. Much of the assessment literature argues that self and peer “assessment can enhance learning most effectively when it does not involve grading” (Spiller, 2012, p. 7). If peer assessment and feedback is done in a way which emphasizes grades rather than the giving of feedback on how work can be improved, it can undermine student cooperation and distract them from developing their skills (Boud, 1995). Treating assessment as a grading opportunity leads students to focus on the grade rather than the learning (Boud & Falchikov, 2006). Boud (1995) explains that little is contributed to the development of student self assessment abilities when peers only mark each other on a set of scales, and grades are presented to the student being assessed. Furthermore, if those peer grades are formally recorded and contribute to students’ final grading, students are at risk of being completely distanced from making their own judgments. Students are trapped into defending themselves and their work from the opinions of others that might have questionable validity and not be accurate, and are not allowed an opportunity to respond (Boud, 1995). However, Boud (1995) offers that when peers provide rich and detailed comments to other students about their work, instead of simply marks, then students may be more able to take this peer feedback, along with their own perceptions, and form judgments which will positively influence future learning.

Another challenge of using grading marks during the peer assessment process is the increased chance of the reciprocity effect, which refers to the social aspect of peer assessment. Strijbos and Sluijsmans (2010) explain that students may tend to give higher ratings to friends, fellow group members, or dominant group members, which decreases the reliability of peer assessment. Yet, Strijbos and Sluijsmans (2010) assure that this social aspect of peer evaluation is not necessarily detrimental by definition, as reciprocity effects make it appear, and so social aspects do not need to be automatically regulated. Peer evaluations only need to focus on “engaging learners with criteria for good practice in any given area and making complex judgements” (Boud, 1995, p. 17), and not on students giving themselves or others grades.

Spiller (2012) cautions again that the use of peer grades is extensively viewed as a process “fraught with difficulties” (p. 10). Thomas, Martin, and Pleasants (2011) agree that concerns are raised about the legitimacy of peer assessments when it includes peer grading that actually counts towards students’ grades (formative or summative). The addition of grades to the peer assessment process can distract and preoccupy students at the expense of everything else (Spiller, 2012). The literature is clear, that introducing grades during the peer evaluation process creates a further set of complex issues that diminishes the most valuable aspect of peer assessment, that of its potential to enhance learning (Boud, 1995; Boud & Falchikov, 2006; Spiller, 2012; Strijbos & Sluijsmans, 2010).

**Practice required.** It should be noted that any new activity will require a percentage of practice for adolescents. The classroom is a place to learn new skills and develop them over time, and peer feedback is no exception. Spiller (2012) advises that students require practice to become competent at peer assessment and gain confidence in this new skill. Gielen et al. (2010) caution instructors to remember that students’ peers are not domain experts, as opposed to

teachers, and consequently peer feedback will vary in accuracy. In order to lessen misleading peer feedback that may be partly or fully incorrect, and achieve optimal learning effects, training in the skill to peer assess has to be provided (Dochy et al., 1999; Gielen et al., 2010). This can be accomplished when teachers spend time establishing a more informal and less threatening “environment of trust” (Spiller, 2012, p. 13) in their classrooms, where students may gain useful perspectives from peers on their work. However, Boud (1995) asserts that students are frequently unused to doing so. Therefore, students, especially beginners, need to be supported through the peer assessment process with chances to practice giving and receiving feedback (Boud, 1995).

Brew (1999) stresses that students will have more positive responses to the use of peer and self assessment “when the teacher’s expectations are clear and when the students have received systematic practice” (as cited in Thomas et al., 2011, p. 3). Three strategies which teachers can use to provide students with ample chances to practice and improve the quality of both self and peer assessment include modeling, scaffolding, and fading.

***Modeling.*** Before engaging students in self and peer assessment activities, Thomas et al. (2011) suggest teachers provide an example of how to self and peer evaluate by showing how they (the teachers) personally use assessment tools and strategies. Giving a demonstration of techniques will help improve student reliability and accuracy by providing a tangible benchmark for students with which to compare their future performance.

***Scaffolding.*** After students have an initial concept of self and peer assessment expectations, Falchikov (2007) recommends teachers first start assessment activities with “structured grading schemes (for example, rubrics), before moving to less structured systems where students negotiate the assessment criteria, before students eventually [develop] their own criteria” (as cited in Thomas et al., 2011, p. 3). Scaffolding systematically builds on students’

confidence and knowledge, and is a useful instructional tool to teach students how to use self and peer assessment practices. Thomas et al. (2011) found that as students gained experience in self and peer assessment practices their attitudes towards assessment became more positive. Also, teachers who provided clear delivery of assessment criteria and rubrics generated more positive student experiences.

***Fading.*** Lastly, as students achieve greater independence in self and peer assessment, over time the amount of direction and level of support offered by the teacher is withdrawn, fades, and then removed (Thomas et al., 2011). This gradual transfer of responsibility from teacher to student allows for students to transition smoothly from a fully guided observer to a self reliant problem solver, “resulting in higher grades, better academic work, increased motivation, mindfulness, learning, and reduced anxiety” (Thomas et al., 2011, p. 3).

## EFFICACY

### **Rationale for Self and Peer Assessment**

Building student self belief and developing confidence “both flow from and are necessary for learning from experience through self assessment” (Boud, 1995, p. 32). McMillan and Hearn (2008) make it clear that the incorporation of self evaluation in the learning process leads to greater student motivation by playing a significant role in the development of student self perceptions. The literature has established that the level of student engagement depends upon the level of students’ self efficacy beliefs: That is, student confidence in their ability to do well on a specific task (Bandura, 1997, 2007; Boud, 1995; McMillan & Hearn, 2008; Pajares, 1997). Boud (1995) explains how learning is influenced by the socio-emotional context in which it occurs, by pointing out that emotions and feelings of confidence are indicators of both barriers to

and possibilities of learning. Although, regrettably, Boud (1995) notes that emotions and feelings are commonly undervalued or ignored in educational institutions. According to Boud (1995) “denial of feelings is denial of learning” (p. 32). Past experiences and the role of others in the present (supportive or otherwise), both influence how students feel about learning (Boud, 1995). Boud (1995) expands on the role of past experiences by describing how everyone, both mature and adolescent learners, mathematicians and artists alike, carries around their personal socio-emotional contexts from previous experiences. This is a “set of expectations about what can and cannot be done - and the present context can reinforce or challenge this” (Boud, 1995, p. 32). The learners’ perception of their experiences during the self and peer assessment process are intimately connected with how learners view their capabilities (Boud, 1995). Developing student confidence and self efficacy beliefs through reflective evaluation is essential for students to become willing to learn from their experiences. Boud (1995) advises creating a learning centered environment rather than a strict assessment context for self and peer evaluation, where confidence is cultivated and learners’ feelings are honored. Boud (1995) recognizes that “a supportive micro-context therefore needs to be established if self assessment for critical reflection is to be accepted by learners” (p. 32). Accurate peer and self evaluation enables learners to recognize when they have mastered a given task and determine when they need further attention or effort (McMillan & Hearn, 2008). “Making these internal attributions is, in turn, based on the ability of students to self assess and self evaluate” (p.44), and this awareness helps students establish strong self efficacy for future performance in similar tasks (McMillan & Hearn, 2008).

## **What is Efficacy?**

Peer and self assessment both produce and are enhanced by students' ability to believe in their capability to complete tasks and achieve their goals. This aspect of self belief refers to efficacy, and is important to understand when teaching middle school adolescents. "Efficacy beliefs affect whether individuals think optimistically or pessimistically, in self-enhancing or self-debilitating ways" (Bandura, 2007, p. 4). Research on adolescents' self efficacy, therefore, starts by asking the right question: "How confident are you that you can successfully perform these tasks?" (Bong, 2007, p. 301). Adolescent students are in the midst of major emotional, social, biological, and cognitive changes as they develop through middle school. Navigating through such changes can cause middle school students to question their self concepts and waver in academic confidence and motivation. This is true in the middle school art room as well. Middle school artists often feel stuck "in the middle," unsatisfied with simple creations, but easily frustrated when unable to perform at adult levels. These feelings can lead to low student participation, unwillingness to try new things, or misbehavior in the classroom. It is the teacher's responsibility to help their students learn to manage their emotions, attention, and behavior in order to facilitate a positive impact on students' future self efficacy beliefs and achievements (McTigue & Liew, 2011). It is important, however, to distinguish between different terms often linked to a student's self concept and self belief. Self efficacy and self esteem can be easily confused because of their connection to a student's self concept, yet each has its own definition and relationship to students' performance outcomes (McTigue & Liew, 2011).

## **Self Efficacy vs Self Esteem**

Self esteem and self efficacy are often mistakenly used interchangeably, however the literature has made it clear that, "self-efficacy is concerned with judgments of personal

capabilities, whereas self-esteem is concerned with judgments of self-worth. There is no fixed relationship between beliefs about one's capabilities and whether one likes or dislikes oneself" (Bandura, 1997, p. 11). Pajares (1997) agrees that self efficacy is characterized in terms of individuals' perceived capabilities to attain designated types of performances and achieve specific results. Bandura (1997) further clarifies by defining perceived self efficacy as, "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3), and self esteem as judgments of self worth, which may vary depending on work, family life, recreational pursuits, and social life. Self esteem may originate from self evaluation of personal competence or capability, in which people develop a sense of pride from fulfilling their own standards of merit; experiencing satisfaction for a job well done, and disappointment in failure. Personal competencies that provide the means for achieving valued accomplishments create the genuine basis of self esteem (Bandura, 1997). Yet, efficacy and self worth represent different phenomenon, as students may judge themselves as completely unskilled in certain areas, without suffering loss of self esteem, simply because they do not attach self worth to that particular activity or skill. On the other hand, students may judge themselves as very skilled in an activity, yet are not proud of that accomplishment. For example a struggling art student may have low self efficacy in watercolor painting, but high overall self esteem if she derives her self worth from other domains (e.g, sports). Alternatively, a skilled art student with high self efficacy in watercolor painting could have low self esteem if she defines her sense of self worth in other domains (e.g., being popular with peers) (McTigue & Liew, 2011). The research generally highlights that people's *beliefs* in their efficacy can have diverse effects (Bandura, 1982, 1986, 1989, 1994, 1997, 2007; McTigue & Liew, 2011; Pajares, 1997; Zimmerman & Cleary, 2007). Such beliefs influence the courses of action people choose to take,

how much effort they invest, their flexibility during adversity, how long they will persevere in the face of challenges and failure, whether their thought patterns are helping or hindering, how much stress and depression they experience while coping, and the level of eventual accomplishments they achieve (Bandura, 1997). Though both self efficacy and self esteem are linked to a student's overall self concept, they are not synonymous and only self efficacy will be discussed further.

### **Self Efficacy Sources**

To better understand the nature of self efficacy beliefs it is useful to understand how Pajares (1997), Bandura (1994, 1997, 1986), McTigue and Liew (2011), and Zimmerman and Cleary (2007) explain how self efficacy beliefs are acquired and developed using four main sources: personal mastery, vicarious experiences, persuasions, and physiological reactions.

**Mastery experiences.** Bandura (1994, 1997, 1986), Pajares (1997), and Zimmerman and Cleary (2007) all describe mastery experiences as the most effective and influential source of self efficacy beliefs. Bandura (1994) explains that a resilient sense of efficacy requires experience in using perseverant effort in order to overcome challenges. After people participate in positive outcomes, convinced they have what it takes to succeed, they persevere in the face of adversity and quickly rebound from setbacks (Bandura, 1994). By assessing the effects of their actions, they interpret these effects in order to create their efficacy beliefs. In general, the more outcomes interpreted as successful the higher the self efficacy; the more outcomes interpreted as failure experiences usually the lower the self efficacy (Pajares, 1997; Zimmerman & Cleary, 2007). However, Zimmerman and Cleary (2007) offer a caveat, that this general rule of thumb does require a qualification, that achievements may be interpreted by students as successes because they attempted to utilize self regulatory strategies such as self evaluation, and tasks interpreted as

failures may only be because of a lack or misuse of self regulatory processes such as unrealistic goals setting.

**Vicarious experiences.** The second solid way of strengthening self beliefs is through vicarious experiences produced by others. Simply put, by modeling desired behaviors, skills, and capabilities. Pajares (1997) explains that the course and direction of a person's life can be significantly influenced by the self beliefs instilled by a significant model. Bandura (1994) agrees that watching similar people succeed raises observers' beliefs that they also have the capabilities to master comparable activities, and succeed themselves. Bandura (1994) also suggests that self efficacy is strongly impacted by the perceived similarity to the models. The successes and failures of the model are more persuasive the greater the assumed similarity with the model. McTigue and Liew (2011) even propose that peer modeling can be more effective than teacher-modeling. However, Zimmerman and Cleary (2007) clarify that models may be various types of individuals (e.g., peers and adults), and they can even take different forms (e.g., live models and symbolic models). Bandura (1994) adds that people also seek proficient models; people who possess the abilities the observers are striving for. By watching a proficient model, the observer can also view knowledge and effective skills and strategies for managing environmental requirements and changes (Bandura, 1994). Zimmerman and Cleary (2007) also advocate for using different formats (e.g., coping and mastery models). They insist coping models, who adapt when confronted with mistakes and persevere confidently during learning, are significantly more effective in sustaining students' sense of self efficacy than mastery models who perform all tasks without having to endure any errors (Zimmerman & Cleary, 2007).

**Forms of persuasion.** Another way of creating a strong sense of efficacy is through forms of persuasion. Though not as influential as mastery or vicarious experiences, persuasion is

a helpful way to encourage growth of self efficacy beliefs. Forms of persuasion consist of verbal cues and conversations that encourage and support, such as feedback and praise. In Bandura's (1984) earlier writings on social cognitive theory, he reveals his belief that a person's milieu, or social surroundings, is a primary agent of their activities, beliefs, and attitudes. Zimmerman and Cleary (2007) agree that a student's perception of efficacy can be either enhanced or lowered simply by the feedback or praise given by important people in their lives (e.g teachers, parents, and peers). Using feedback helps students evaluate their performance and encourages them to then make adaptive self reflections. Through the use of feedback students can identify their successes and mistakes in relation to their goals and then be reassured that poor performance is attributed to ineffective strategy use instead of unchangeable factors such as ability (Zimmerman & Cleary, 2007). However, successful forms of persuasion should not be confused with "knee-jerk praise or empty homilies" (Bandura, 1997). McTigue and Liew (2011) advocate for specific, accurate, and process oriented feedback. *Specific* feedback should avoid generic phrases like 'good job', and instead provide explicit and individualized commentary on the student's performance of a particular skill. *Accurate* feedback gives students judgments on their present performance in reference to past performance. Finally, *process-oriented* feedback connects learning to effort by accentuating working hard above being smart. Students retain the power to control their effort and process and using specific, accurate, and process-oriented feedback encourages them to sustain effort towards their learning (McTigue & Liew, 2011). Along with positive comments in order to raise people's beliefs in their capabilities, those wishing to raise efficacy must also be aware of the situations students are being put in in the first place. Settings should be structured to lead students to success and avoid settings where students struggle for too long or are likely to fail often (Bandura, 1994). Persuaders must raise students' beliefs in their

ability to perform successfully, while also ensuring that the success is actually attainable. Also, it is key to remember that just as positive persuasions work to advance efficacy beliefs, negative persuasions can breakdown and dismantle self beliefs (Pajares, 1997). Bandura (1986) insists that “it is usually easier to weaken self-efficacy beliefs through negative appraisals than to strengthen self-efficacy beliefs through positive encouragement” (as cited in Pajares, 1997, p. 21).

**Physiological reactions.** The last source of self efficacy beliefs discussed is understanding physiological reactions. People rely on their bodily and emotional states when judging their performance and abilities. They interpret stress reactions, like anxiety, and physical tensions, such as a nervous stomach, as sign of vulnerability to poor performance. For example, if an art student gets anxious during detailed drawing lessons, she may interpret her rapid heart rate, sweating palms, or tense shoulders as indicators of personal incapability (Zimmerman & Cleary, 2007). Bandura (1994) adds that mood also affects people’s judgments of their self efficacy. “Positive mood enhances perceived self-efficacy, despondent mood diminishes it” (Bandura, 1994, p. 3). In order to modify self efficacy beliefs students need to reduce their stress reactions and alter their negative emotional proclivities and misinterpretations of their physical states (Bandura, 1994). Pajares (1997) explains that intense emotional reactions to a task will provide cues about the student’s predicted success or failure. Moreover, it should be noted that when students experience negative thoughts and despair about their ability to perform, those adverse reactions themselves can actually work to lower feelings of capability even further, and trigger the stress and fear that help provide the poor performance they dread in the first place (Pajares, 1997). Helping students learn to manage their physiological reactions,

emotional responses, and subsequent behaviors could have a positive impact on their future achievements and self efficacy beliefs (McTigue & Liew, 2011).

### **Positive Effects of High Self Efficacy**

A student's belief in their efficacy is pivotal in their academic and personal development. Simply, efficacy beliefs affect how students think; positively or negatively, with a helpful or hindering mindset (Bandura, 2007). Efficacy beliefs affect how students set goals and aspirations for themselves, how well they can persevere during challenges, and whether or not they can generate motivation to accomplish those goals. These beliefs also form the foundation for students' outcome expectations, that is, "whether they expect their efforts to produce favorable outcomes or adverse ones" (Bandura, 2007, p. 4). Adolescent middle schoolers can fall into a downward spiral of low efficacy where they are easily convinced that their effort is useless in the face of difficulties; challenges are viewed as insurmountable. These students promptly quit or mask their anxiety with feigned (or real) disinterest (McTigue & Liew, 2011). However, students with high efficacy beliefs view obstacles as conquerable by applying applicable strategies and resilient perseverant effort. Efficacy beliefs contribute significantly to socio-cognitive functioning, performance accomplishments, overall emotional well-being, and also positively affect student agency, self regulatory processes, and levels of motivation and achievement (Bandura, 1994, 1997, 2007; Bong, 2007; McTigue & Liew, 2011; Pajares, 1997; Zimmerman & Cleary, 2007).

**Increased sense of agency.** According to Bandura (2007), personal efficacy is the most fundamental and prevalent mechanism of human agency. This core belief, that an individual's actions have the power to effect change, is the foundation of motivation, accomplishment, and well-being. Students have very little incentive to persevere through obstacles, unless they

believe their efforts and capabilities will eventually produce the desired results (Bandura, 2007). In Bandura's (2007) concept of efficacy from an agentic perspective, adolescents are, "self-organizing, proactive, self-regulating, and self-reflecting" (p. 3). Higher self efficacy promotes an increased sense of agency where students can intentionally contribute to their life circumstances, instead of being products of them. Bandura (2007) further explains that students have unlimited resources, such online instructions and information, museums, and comprehensive libraries, all accessed through the internet. Students can independently educate themselves, unrestricted by time and place. Students with high efficacy have the confidence to be "agents of their own learning not just recipients of information" (Bandura, 2007, p. 10).

Bandura (2007) clarifies four core features of human agency, which are helpful to gain a full understanding of the connection between self efficacy effects and personal agency. First is intentionality. People develop in their mind intentions that include general goals, plans, and strategies for realizing them. The second feature is forethought, which includes visualizing likely outcomes for those goals and anticipating prospective actions. Envisioned futures, through forethought, can serve as current guides and drive actions. "A vision of a desired future helps to organize their lives, provides meaning to their activities, motivated them, and enables them to tolerate the hassles of getting there" (Bandura, 2007, p. 10). Third, agents are self regulators. Bandura (2007) describes self regulators as those who monitor their actions and adjust their behavior, to align with high personal standards. The last core feature is self examination. Using a sense of self awareness, students reflect on the integrity of their thoughts and actions, the intentions of their pursuits, their confidence throughout the process, and then plan future corrective adjustment if necessary (Bandura, 2007). Overall, the beliefs held about capabilities to

produce results by actions, through intentions, forethought, self regulation, and self examination are an influential personal resource for students to travel through the life cycle (Bandura, 2007).

**Use of self regulatory processes.** Zimmerman and Cleary (2007) emphasize that an adolescent's sense of personal efficacy is especially influenced by their capability to self regulate their functioning. Students who have a high sense of self efficacy have the confidence to set ambitious goals for themselves, use effective strategies, self monitor, self evaluate, and attribute unsuccessful results to flexible processes. Zimmerman and Cleary (2007) breakdown self regulation into three main phases and respective processes. 1. Forethought phase, including goal setting, strategic planning, self motivational belief processes, 2. Performance control phase, with self observation and strategy use processes, 3. self reflection phase, including self evaluative standards attribution processes (Zimmerman & Cleary, 2007). For example, an art student may apply goal setting (e.g., I will read this web page to research the elements of art and design), self monitoring (e.g., Did I really understand that?), and self evaluation (e.g., I did not understand that page, I should find another source) (McTigue & Liew, 2011). Adolescents are significantly empowered to use these vital developmental processes when performance tasks are designed to enhance and develop these self regulatory functions (Zimmerman & Cleary, 2007). This requires instructors to maintain a level of self influence in every aspect of student learning experiences, in order to create efficacious self regulators who achieve skill, knowledge, and intrinsic interests in scholarly matters, instead of weak self regulators who reach limited self development (Bandura, 2007).

**Perseverance, motivation, and achievement.** Increased self efficacy beliefs also promote the effective use of perseverance and motivation in order to achieve personal goals. Bandura (1982, 1986, 1989, 1994, 1997, 2007) echoes a continued sentiment throughout his

literature, reiterating that it is not enough to have self management (or any other kind of) skills. They add little if students cannot get themselves to apply those skills persistently despite challenges and difficulty. Bong (2007) agrees that an enhanced sense of self efficacy “invariably leads adolescents to function more effectively in taxing academic situations” (p. 301). Bandura (2007) also notes that adolescents are more likely to use perseverance when they have meaningful goals that give them purpose and a sense of accomplishment. “Without personal commitment to something worth doing they are unmotivated, bored, and cynical” (Bandura, 2007, p. 10). Students with strong self efficacy, are able to utilize perseverant skills and commit themselves, in order to set higher aspirations and achieve accomplishments (Bandura, 2007). Bandura (1997) warns that “insidious self doubts can easily overrule the best of skills” (p. 35). By encouraging the development of high self efficacy, especially in adolescents, the self assurance with which they approach and manage difficult tasks will help them make good use of their capabilities (Bandura, 1997). “In short, perceived self-efficacy is concerned not with the number of skills you have, but with what you believe you can do with what you have under a variety of circumstances” (Bandura, 1997, p. 37). Students who have a firm belief in their self efficacy use motivation as the staying power in the face of stressors, competing attractions, and any escalating obstacles (Bandura, 2007).

#### LITERATURE REVIEW CONCLUSIONS

Boud and Falchikov (2006) argue that “greater attention should be given to preparing students for the learning they will engage in throughout their lives” (p. 411). They have established that preparation for lifelong learning is necessary and involves teaching students to evaluate themselves and others on the quality of work through self and peer assessment (Boud & Falchikov, 2006). Dochy et al. (1999) make it clear that the main reason why these self and peer

assessment techniques need to be integrated into classroom curriculum is their impact on the learning process which leads to greater student motivation, higher self efficacy beliefs, and deeper learning. Longhurst and Norton (1997) state that self and peer assessment are “clearly an important part of helping students to improve their own learning, as it focuses students’ attention on the metacognitive aspects of their learning and teaches them to be more effective at monitoring their own performance” (as cited in Dochy et al., 1999, p. 346). This provides students ownership over their learning, not just to please a teacher or pass a test, but to support a student’s sense of agency by giving them the chance to learn how to learn for themselves (Henriksen Andrews, 2010). It is evident that the use of self and peer assessments are also influential in removing the student/teacher barrier, helping students become realistic appraisers of performance, both their own and others, by empowering them to oversee their own learning, rather than relying solely on teachers for feedback (Dochy et al., 1999; Thomas et al., 2011). Through the successful implementation of peer and self evaluation, students’ perception of the teacher can shift from commander to facilitator; one who guides them in creatively expressing their opinions, communicating ideas in new ways, and achieving their goals (Henriksen Andrews, 2010). According to Henriksen Andrews (2010) this self and peer assessment learning opportunity allows students to develop their strengths and interests, and students, especially reluctant learners, transition their view of the teacher from an adversary to an advocate who works with and for them. Thomas et al. (2011) insist that self and peer assessment processes are more than a classroom gimmick or fad. They can provide some of the best assessment strategies to promote self confidence, accountability, independence, and a measurement of students’ future learning. However, to best stimulate future learning, “assessment tasks must be designed with future application of those skills and knowledge in mind” (Thomas et al., 2011, p. 14).

McMillan and Hearn (2008) assert that meaningful motivation and improved performance are possible when students “set goals that aid their improved understanding, and then identify criteria, self-evaluate their progress towards learning, reflect on their learning, and generate strategies for more learning... surely, those steps will accomplish two important goals- improved student self-efficacy and confidence to learn” (p. 48). Most of this powerful literature on self and peer assessment is focused on the implementation and ramifications in higher education, yet “meaningful motivation and improved performance” through self and peer assessment need to be sought after earlier in a students’ educational journey in order to achieve more. Boud and Falchikov (2006) agree that “a new way of talking about how learners monitor their work and make decisions about learning is needed” (p. 407). In the following sections I attempt to create this “new way of talking” by discussing my own classroom teaching experiences utilizing self and peer reflective assessment techniques with adolescent 7th and 8th grade artists. Through my study, I am trying to explore the benefits of peer and self reflective evaluations and assess the use of many evaluation techniques in the middle school art classroom, since there is little current scholarly literature available on this topic. My study also helps to determine which techniques best increase students’ positive mindsets, confidence, independence, and motivation in hopes that my research and review might stimulate other art educators to reflect on their own assessment practices and to find ways to inspire their own students to achieve deeper learning. Henriksen Andrews (2010) explains that students have multiple roles and responsibilities in the art classroom, working as artists, learners, and as teachers who assist their peers. With this mindset, students can take responsibility for their own learning, create their best work, and “discover a deeper appreciation for art and the creative process” (Henriksen Andrews, 2010, p. 46). My students participated in a variety of oral and written evaluation

classroom techniques and shared their opinions of the classroom techniques used, the evaluation benefits, and the potential growth of self confidence and efficacy (that is, belief in their own ability to control their motivations, behaviors and achieve their goals) in the art classroom, with the goal of validating the implementation of peer and self evaluations as a credible way to enhance the art experience, and build confidence and self awareness in middle school art students.

## MIDDLE SCHOOL ART ROOM SELF AND PEER EVALUATION STUDY

### **Research Purpose**

Middle school art students struggle with self confidence on a daily basis. Each new art project requires students to hone new skills, try unusual techniques, and demonstrate self expression. This may leave students feeling intimidated. Often the middle school art classroom can be filled with vulnerable young students who pretend not to care in order to protect their insecurities. “They know how little they know and they fear the depths of their ignorance” (Boud 1995, p. 45). Middle school adolescent students choose false apathy to mask their battle with self confidence. It is these students who also value their peers' opinions, arguably more than anyone else's. Boud (1995) understands that it is “difficult enough for students to open themselves to judgments which may contradict their existing knowledge without having to defend themselves from criticisms of others” (p. 32). It is with this realization and understanding that I have worked to turn those valued peer opinions into constructive feedback for young artists in my classroom in order to build confidence and break through the harsh middle school persona. Creating a safe space for students to fail, succeed, and openly talk about those experiences is needed in order for feedback and reflection to be valued. Research shows that the use of peer and self assessment in the general classroom setting can boost student self efficacy and have

positive results (Boud, 1995; McMillian & Hearn, 2008; McTigue & Liew, 2011), yet my focus is on how to help middle school *art* students take control of their own learning. Therefore, the purpose of this study is to further understand the positive results of peer and self reflective evaluations, and provide examples and validate the use of many assessment techniques, specifically in the middle school art classroom, to determine which techniques best increase students' positive mindsets, confidence, independence, and motivation. My overall goal is to bring attention to and increase classroom use of successful peer and self reflective evaluations, ultimately for the benefit of art educators and students in their individual artistic and social growth.

### **Setting the Stage**

**Who & what.** I intended to recruit roughly 40 participants from my 7<sup>th</sup> and 8<sup>th</sup> grade art classes, both male and female, in the 11-14 year old range. However, in true middle school fashion, I found it challenging to get students to use responsibility and return their consent forms, which were necessary to include their assessment results in my data. Data collection required students to participate in a variety of oral and written evaluation classroom techniques. Students shared their opinions of the classroom techniques used, the evaluation benefits, and the potential growth of self confidence and efficacy in the art classroom. Techniques included (a) classroom critiques, where students discussed each other's artwork verbally and in writing by sharing their personal analysis, insights, and opinions of peer artwork; (b) mid-project check-ins, where students gauged their current progress in relationship to intended end results, and also partnered with peers mid-project to discuss each other's progress, successes, and potential edits; and (c) summative self evaluations, where students talked and wrote about their own artwork, including the process of creation, failures, successes, inspirations, and personal feelings towards their

results. Students were informed of their choice to include their assessment data in my research and if they had questions they contacted me in person during or after class for clarification. When all of the study information was understood students then signed a consent form (along with their parent) if they agreed to participate. After months of repeated reminders and additional consent forms, I was able to successful enroll 28 students into my study on self and peer reflective evaluations in the art room. This initial recruitment challenge speaks loudly of the frustrations in middle school teaching.

**When, & where.** The study was conducted August – December, 2016, during my 7<sup>th</sup> and 8<sup>th</sup> grade art classes. Each in-class peer or self evaluation ranged from 10-30 minutes to complete, depending on the activity and attention span of individual students. Students attended art class twice a week for 45 minutes, and were able to participate in at least two evaluation techniques per month. My middle school 7th and 8th grade art classes were formatted as studio workshops, where students have a high level of freedom to move about the room, gather supplies as needed, and interact with others during the creation process. Students typically did not have assigned seats (unless freedom was abused and the need arose). Students were often at differing stages of the art process; when some students were sketching their layout for composition, others were in the creation phase, and yet others still researching. Most of these 7th and 8th graders were returning art students who have taken my classes for several years, creating a strong relationship and continued rapport. I was able to implement many of the following assessment techniques because of this history.

**Design.** The study was designed so that students participated in normal 7<sup>th</sup> and 8<sup>th</sup> grade studio art experiences, where a variety of artwork was produced. Throughout the studio experience students were given many opportunities to participate in mid-project peer evaluations

that encouraged honest communication between students. Students also participated in end of unit evaluations and critiques of each other's art, and self evaluations to review their own specific art process and experience. Students completed these written and verbal evaluations periodically throughout the art course in order to become accustomed to an environment of open communication, peer support, and self responsibility in art. Students participated in many different variations including formal, informal, written, verbal, whole class, individual, and small group in order to expose students to a large variety of techniques and gain as much data from their experiences as possible. Examples and classroom applications of these techniques make up the following sections.

### **Methodology and Techniques**

There is an abundance of assessment methods for conducting classroom evaluations, which are often titled critiques in the art room setting. “Simply stated, a critique in an art classroom is an evaluation of student artwork” (House, 2008, p. 48). The methods chosen for a classroom assessment should be determined by the educational goals and the questions needing to be answered in the critique. Methods can be formal or informal, and conducted formatively throughout a project or summatively at the conclusion of a project. According to House (2008) formal critiques analyse the use of the elements and principles of art, such as color, form, space, movement, etc, the use of media and technical concerns, and questions based on the concept or subject matter in depth, typically with a large amount of time and organized parameters. Informal critiques may include many of the same topics as formal methods, yet usually have less time allotted and have a spontaneous, unofficial quality, perhaps only including verbal interchanges not meant to even be documented. The term critique may also remind students of the term art criticism, yet it is important to explain that art criticism is not the same thing as an

art critique. While both art criticism and critiques include judgments, descriptions, and interpretations, their intended purposes differs. Barrett (2000) “identified the audience for art criticism as the public and noted the usual purpose of a critique is to improve the art being made. Therefore, the audience for the critique is the artist/student” (as cited in House, 2008, p. 48). It should be made clear to students that art criticism is used to educate the public, whereas the classroom critique aims to educate the art student and their peers (House, 2008). All of these components should be considered when deciding which art critique method to choose. Miller (1999) identified the characteristics of successful critiques as “knowing one’s role and the goal of the critique, the establishment of a positive, and consistent structure as well as showing appropriate interest and concern for all students” (as cited in House, 2008, p. 50). Below are several examples of classroom art critiques used in my 7th and 8th grade art classes, including informal formative self and peer evaluations, and formal summative self and peer evaluations. However, there are countless critique methods appropriate for the art classroom and my intention is to inspire other art educators to envision how they might incorporate self and peer assessment techniques in their own art rooms, and not to limit those teachers to my examples exclusively.

**Informal formative mid-project self and peer check-ins.** Mid-project assessments take place several times during the course of a project. They are intended to give students an opportunity to formatively evaluate their personal progress and consider both positive peer input and constructive suggestions in order to make needed changes before any formal grading occurs. Austin (1999) supports in-progress critiques, noting that his “students were not as protective of their work while they were still working on it” (as cited in House, 2008, p. 49). These mid-project check-ins are informally implemented, meaning they are quickly and casually conducted, and once taught can be used and utilized by students without teacher supervision.

*Sandwich critique.* The sandwich technique asks students to provide feedback to peers following a positive/constructive/positive comment format. The sandwich consists of meat (constructive criticism), ‘sandwiched’ between two pieces of bread (compliments). Bogatz (2014) explains how this routine presents students with a positive start and positive end, but still allows the opportunity for peers to give meaningful suggestions for improvement. By supplying a simple three step feedback template, beginning students are provided guidelines for starting a conversation about peer art and giving comments. This format provides a starting point from which more in depth and advanced assessment can be developed. Once comfortable with the basic idea, Bogatz (2014) says that students may practice adding extra “ingredients” to their sandwich by asking questions and making connections outside of art, etc.

My 7th and 8th grade art students were presented with the sandwich critique as a way to “dip their toes” into providing peer feedback, and set basic standards for critique etiquette. My 7th and 8th grade classes have participated in peer critique methods before, so the overarching concept was not new to them, however I reminded them of respectful feedback expectations and a need for project specific vocabulary before starting the critique. Many inexperienced students can present vague phrases such as, “that looks good”, or “I like it”. In order to avoid such comments, I presented students with two examples of sandwich critiques, and helped them tangibly visualize the method by actually drawing two basic sandwiches on the whiteboard. One sandwich read, “Wow! Cool painting. It doesn’t look all the way done... but I still like it.” The second sandwich read, “Wow! I love your use of blue and green paint to add texture in the water section of your painting, it really adds movement. You could possibly add more detail to the lighthouse section because that portion of you painting doesn’t look as complete. I really love how your color choices make me feel calm.” I asked students to compare my two sandwich

critiques and decide which one they would prefer to receive, why, and any opportunities they saw to add even more feedback. It was apparent to them, that the more specific sandwich using art vocabulary was superior. By viewing an inadequate feedback example, which still followed the positive/constructive/positive format, students were able to see how even though the steps were followed it lacked any real substance, much like a sandwich made with stale bread and no meat. Some students even laughed at the absurdity of the vague sandwich, which made me optimistic for implementation.

Once students were introduced to the sandwich method, given examples and guidelines, I had students trade their in-progress artwork with a peer. Though students may surely use the sandwich technique verbally, I instructed students to practice a written version first, this way I would be able to better monitor their responses. Students had the option to actually draw a sandwich if the visual would aid them in performing the technique, which some did. Students then completed their sandwich, and received their own feedback. I asked for student volunteers to share some of the comments they received. As a class we then discussed the success of some comments and how others might be lacking. One 7th grader, referring to the technique said, “I like the sandwich idea because you get both something you did well and what you can work on.”

When using the sandwich technique again, after the preliminary “how-to” session, I reviewed the directions and provided prompts with the format (e.g. you were successful at/ possible edit is/my favorite part is) and asked students to give extra feedback or explanations when compelled. For example, a 7th grader provided her peer with specific feedback on how to improve her landscape painting by saying, “Texture looks perfect! For the mountain I would mix a lot of gray and a little green to make your mountain pop in color.” Pairing constructive feedback with suggestions of strategies to help was an extra challenge for many students. I used

the sandwich technique several times, throughout the study, and eventually asked students to implement this critique style on their own when needed. Many students also used this critique format as a guide for feedback during other critique methods, such as verbal table conversations.

***Table conversations.*** Table conversations are simply when students work together, either one-on-one or in small groups to engage in a respectful and meaningful discussion about their artwork (Slinkman, 2017b). Table conversations may have a variety of catchy names, often incorporating alliteration in hopes of hooking students' attention. Sometimes called Glow and Grow by Slinkman (2017b), peer table conversations help students appreciate the importance of collaboration and communication with fellow artists by requiring students to partner with peers (usually at their own tables) and ask them to look at their work, provide feedback, and possible strategies to work through challenges. These conversations can be facilitated by the teacher periodically mid-project to ensure students are receiving formative feedback and practicing how to discuss and articulate choices made during art creation. This helps build student confidence when communicating about art. As students become comfortable with critique etiquette by giving and receiving appropriate peer feedback, table conversations may become more routine and common place throughout the art process. Eventually the goal is for students to self regulate their need for input and independently conducted table conversations on an as-needed basis without teacher intervention. Students learn that they have the power to help one another, which helps shift the culture of the art room from a teacher-led to a student-led environment (Slinkman, 2017b).

When implementing table conversations in my 7th and 8th grade art classes, I first acted as the facilitator. I introduced the idea of casual table interactions as a means of peer critique in the beginning stages of an identity art project, where students were required to use heraldic

images, symbols, and colors to communicate their personal identity. Students researched the heraldry and the meanings associated with particular images and were in the idea/research/sketch phase of their artwork. Students had yet to actually start the creation of their projects and were only developing their concepts. I prompted students to describe their project ideas, decisions, and sketches with peers sitting nearest. Everyone was required to participate at the same time. Students discussed their ideas and decisions behind them, and asked for advice if they were unsure of their choices. I circulated the room and listened to conversations at each table. If the conversations had already concluded when I arrived, I asked the students to recap their conversation, which demonstrated how much the artist was listening to the peer feedback given. I then offered my advice on enriching their conversation for future interaction.

It was important for me to have students practice peer table conversation early in the art process (on day one of a new project) to emphasize the advantages of utilizing peers as assets not only after creation, but throughout the entire creative process. I explained to my students that they would not wish to spend three days on a project only to receive feedback which negated all of their work, or could have been easily edited if they were made aware of it earlier. One student pointed out that, “[Table conversations are] the most beneficial for me throughout because then I can fix my mistakes as I go and not have to worry about it at the end.” In order to avoid surprise feedback at the end of a project, collaborative and continuous conversations are necessary. I explained that students did not want to get to the end of a project and in hindsight say, “Why didn’t anyone tell me?”

After students were given devoted time to practice table conversations they were instructed to utilize this technique as needed throughout the art creation process, and not to rely on only the time facilitated by me. I periodically provided time for students to check in with

each other and practice the table conversation technique throughout each project created during the duration of the study. Many students took advantage of these conversations and one 7th grader said, “My favorite way of evaluation myself is asking my peers for advice to improve my art piece.” Nearing the conclusions of each project, I suggested and encouraged use of peer check-ins even more. If students encountered challenges or asked me if they were ‘done or not’, I directed them to their peers instead, asking them to have at least three different peer table conversations for feedback and advice, with the goal of instilling repetition into routine.

*Sticky note critique.* The direct nature and simplicity of a sticky note critique easily lends itself to the strengths of 21st century students (Hare, 2015). Hare (2015) explains how 21st century students should be phenomenal at leaving succinct feedback for their peers because of their immersion in technology and social media, including lightning-speed tweeting, posting, and commenting. Stick note critiques provide a direct application for quick communication. Sticky note critiques (often used with the TAG method) move quickly and efficiently, requiring students to give straightforward, yet meaningful feedback to peers with either direct suggestions to help improve their work, ways to facilitate progress, or positive affirmations of a job well done. Because of the physically small space available on a sticky note, students have to successfully communicate their feedback in the space no larger than a short text or tweet. This encourages students to utilize their subject matter vocabulary in order to get their point across in the small usable sticky note space. This method may be applied both formatively and summatively, depending on the needs and goals of the students and teacher. A popular method which applies the stick note technique is called the TAG method, however the sticky note technique may also be used as the vehicle for other peer assessment methods (as seen later in my own 7th and 8th grade application).

Students start the sticky note TAG process by placing their artwork on their work tables. Again, this may be their in-progress work, or their finished art ready for summative critique. Once all artwork is ready to be viewed students prepare their sticky note by writing the letters “T.A.G” down the left side, leaving a bit of room between each for comments. If students are peer assessment beginners, or an environment of trust has not yet been established, students should write their names on the back of their sticky note to help ensure accountability and positive interaction. Students then walk around the room, viewing each artwork. When students have viewed the entire body of art they choose an artwork to critique. Each artwork may only have one sticky note, ensuring that each artwork receives feedback. Though not necessary, it is common for teachers to play music as students walk in order to create a calming atmosphere, and some teachers even use the music as an indicator for when students should choose their artwork to assess, much like musical chairs; students evaluate the artwork they are at when the music stops (Hare, 2015). Students then respond to the artwork quickly, and straight to the point, in this case using the three letter prompts, TAG: T- tell the artist something you like, A- ask the artist a question, G- give the artist a solution. The sticky note is then left for the artist to process.

I, however, first introduced the sticky note method as a way to generate positive vibes in my 7th and 8th grade art classes. Students followed the steps listed above, (circulate the room, choose a piece to respond to, leave their note), but I instructed students to only write a positive affirmation to their peer, much like a nice text they might send to their friend. I demonstrated several examples of adequate use of art vocabulary, and reminded students of the useless nature of vague terms such as “good job”. I also reiterated the intention of being quick, and then moving on in the art process. An 8th grader provided a succinct example of a sticky note affirmation, writing, “I like your color variations and pinch pot technique.” A 7th grader

commented on liking the quick aspect of the sticky note critique because it was, “short and to the point.” I recognized an opportunity to utilize the sticky note technique in order to add a quick, extra boost of positivity into the experience of my adolescent artists. By first introducing the sticky note as an affirmation opportunity I provided a mini mastery experience for students which I hoped, in turn, would boost student self efficacy beliefs, and their determination to proceed confidently through the remainder of their project. After introducing the style and technique using only positive comments, I then opened the critique up to the TAG and sandwich method for future applications, yet encouraged students to utilize my pile of sticky notes for impromptu affirmations when compelled. In response to the sticky notes, one student said, “The sticky note is simple and tells me what to improve on right away.”

**Goal setting.** Using daily goal setting is another useful informal formative self evaluation tool appropriate for the middle school art classroom. Students identify a specific goal targeted on completing a certain task, or learning a certain skill, that can be accomplished within a short amount of time. McTigue and Liew (2011) identify that daily goals with short proximity are useful because, “those that are accomplished quickly, including those within a matter of minutes, result in greater motivation and higher self efficacy” (p. 118). When students achieve their specific goals, (e.g. today I will create and add at least 6 successful clay coils to my piece), their confidence in their ability to complete the entire project (e.g. create a ceramic vessel utilizing a variety of hand building techniques) grows. McTigue and Liew (2011) also note that the achievement of specific goals rather than a general goal like ‘try my hardest’ are much easier to evaluate and therefore more likely to raise self efficacy. Specific goals, which are derived from the students’ self evaluation, are tangible reminders of student triumph and can quickly increase student future effort (Slinkman, 2016).

When presenting the routine of goal setting to my 7th and 8th grade art students I first began by conducting individual conversations with each student. I circulated around the classroom during work time and had brief conversations with each student about what they were currently working on, what still needed to be accomplished to complete their project, any logical order for those steps, and any skills that might be more challenging and therefore take more time to master. After facilitating this mini self evaluation with each student I asked them to realistically set a goal to work towards by the end of that specific art period. I provided examples of appropriate goals, and then allowed them time to consider their own. If their goal was under what my effort expectations were, I simply suggested their goal be a baseline for completion, and when they accomplished it they should have a secondary goal prepared. If their goal seemed too lofty in the time restraints, I also suggested other options for students to consider. A 7th grade student said, "I like daily goals because I can work at my pace and help myself plan out what needs to be done." Guiding students through the first few class periods of daily goal setting, I helped them understand how to decide what their goals should be and how to realistically gauge the level of rigor attempted. At the end of each class I asked them to re-evaluate their goals. Were their goals achievable? Were their goals challenging enough? Were their goals too ambitious? How will this knowledge affect their goal next class period? I implemented goal setting as a daily routine. I then faded out my level of involvement in individual student self assessment, analysis, and goal setting, so that eventually I only circulated the room and asked what goal they had prepared for the day. Students responded positively, saying, "[By using] daily goals you are guaranteed to finish something each day and only focusing on one thing makes sure it has your full effort."

**Formal summative peer critiques.** Summative peer critiques occur at the conclusion of each project and provide intentional and devoted class time to talking and writing about each other's artwork. It is important to note that none of the following peer critiques incorporate peer grading. As stated previously, literature on the subject of peer grading makes it clear that emphasizing grades rather than the giving of feedback on how work can be improved, can undermine student cooperation during peer assessment activities and lead students to focus on the grade rather than the learning (Boud, 1995). Also, as a reminder, House (2008) emphasizes that a "good critique should include both positive reinforcement and constructive criticism" (p. 48). These peer assessments are considered formal because of their official nature. Students are required to document their thoughts, judgments, and insights, and methods are conducted in an orderly fashion usually under the direction of the teacher.

**Gallery walk.** The gallery walk is an extended, formal, and summative version of the sticky note critique previously described. Students lay out their finished piece of artwork, circulate the room to view peer work, and then provide feedback. Instead of a small note with succinct comments, students are provided large papers which remain next to their artwork. There is enough space for several students to respond. "I like that the number of people who can give their opinions is not limited," said one student, "so I know what more people think." In some cases prompts are included, though not required. Students circulate the room and leave their feedback on at least three peer pieces. Requiring many more than three can cause middle school students to mentally fatigue, resulting in less thorough responses. The gallery walk encourages students to envision their peer artwork as if it were hanging in a gallery. Students are to consider what sort of questions arise while viewing the pieces, what can be synthesized from the artwork, how the work makes them feel as a viewer, what they think is being communicated,

etc. Gallery walk feedback comments are intended to elicit higher order thinking, deeper than surface responses to craftsmanship (i.e. how clean and neat the results are). Christenson (2016) even recommends that instructors also participate in the gallery walk and share their ideas alongside students. When students see their teacher joining in the same activity they are asked to do Christenson (2016) describes this as a powerful way to automatically raise the stakes. This also allows teachers to do quality control, and address any concerns regarding student comments or critique etiquette. When students have commented on an appropriate amount of peer artwork it may also be beneficial to share a few comments with the entire class, so that students may hear what others felt in comparison to their interpretations.

The gallery walk can be an enjoyable experience. I used it with my 7th and 8th grade class in combination with their personal self evaluations. Before evaluating themselves, they were given the time to respond to others, and read their own. Taking the time for students to see how others interpreted the assignment and viewed their end results might change how individual students then assess themselves. I had students set out their finished projects and gallery walk paper at their workspace. I reviewed the stipulations for appropriate critique etiquette, reminded students to look past just the craftsmanship, and to ask questions and respond thoroughly. I then demonstrated a gallery walk by circulating around the room, and stopped at a student's artwork to write my response. I read my response so that all students could hear what I had written. "I was drawn to your artwork because of the contrast of bright colors used to create the background of your piece and the dark colors used for your foreground. The stark difference you've created makes me wonder which part of your project you want me to focus on. Though the bright yellows and reds remind me of a fiery sunset, I'm more drawn to the dark silhouetted images of trees and animals. Are these images anyplace specific? I remember you have family in

California, so I think they may represent the trees and animals caught in the forest fires. Beautiful job!” I then had students join me by writing their own critiques as I continued to walk around viewing artwork and responding on gallery walk papers. When needed, I drew students to sections of the room with little comments or would ask students to return to a previously written comment and add more, or edit for clarity. At the closure of their first experience with a formal gallery walk, I asked students to share some of their feedback, and opinions of the gallery walk experience. An enthusiastic student responded, “I love the gallery walk because I can see the different kinds of finished projects, and I like hearing other people’s feedback.” Once students had an appropriate amount of time to digest their critiques they then completed their own self assessment with a more well rounded view to assess from. An entire class period was set aside to devote to these two assessments.

***Whole class critique.*** A classic example of a formal summative peer assessment is the whole class critique. Though the step by step method may vary by classroom, this critique requires whole group participation, meaning all students are involved in the same critique, and aware of the comments made about each student artwork. This is a public form of critique where students typically take turns verbally reviewing each other's artwork in front of the whole class. This allows for all students to hear the opinions of peers regarding student art, and in some cases respond or debate those opinions. The intensity of a whole class critique can feel destructive without precautions and guidelines in place to ensure a safe environment. Bulka (1996) describes that any college art student, including art teachers, remember these critiques as a “test of fire, where their work, ideas and sometimes self-confidence, self-image and soul are subject to the scrutiny of their instructors, and more importantly peers” (as cited in House, 2008, p. 48). Yet, whole class studio critiques (familiar in a college setting) should not be a test of fire for

adolescents. In the middle school art room whole class critiques should shift from excessive judgments to interpretation and analysis, in order to create a constructive and informative experience for student artists (Van Camp, 2001). In order to avoid an aggressive climate during whole group critiques, House (2008) recommends asking students specific questions about each work, in order to start the conversation, thereby creating points of entry for students like arrows that direct the conversations around the student art. By allowing students to consider and examine peer artwork together, student conversations are open to topics such as artist's intent and discussed in possible relevance to understanding the artwork (Van Camp, 2001). All of this information and rich discussion may provide both the teacher and student with a measurement of strengths and weaknesses of the artwork.

I was cautious when using this critique style in my 7th and 8th grade classes. I had to make sure I had an environment of respect and trust, not only between myself and students but peer to peer as well. When discussing this method with colleagues who teach at other middle schools they were unable to implement this without fear of inappropriate comments, and essentially a waste of time and hurt feelings. It is true that the verbal, public, spotlight nature of this style of critique can lead to defensive or hostile energy, yet I felt confident in attempting this method because of the relationship built with students throughout the years. I chose to guide students through this critique method, as the facilitator, allowing for freedom of comments, but mandating a respectful tone at all times. I was in the driver's seat, so to speak, for this peer assessment technique. Before starting the critique I had all students clip their artwork to the whiteboard so all art was visible at one time. This is a clear way to view the entire body of work. Students then arranged their chairs as an audience, facing the artwork, and prepared their feedback. It can be exciting for students to see so many successful results, and can instill a sense

of group pride, while also revealing differences between each artwork. One student said, “My favorite way of evaluating myself is by putting my ‘complete’ project on the board and looking at it from a distance. It helps me look at it from a different way and I can see what I should change.” By allowing students time to view and digest the artwork, students are better able to gather their thoughts and form opinions, instead of speaking off the cuff during a critique, or responding with the ever annoying, “I don’t know”.

My method of whole class critique started with me. As the facilitator I chose an artwork to critique, therefore demonstrating the technique and setting the tone. I reminded students that if they drew a blank on what to say, they may always follow the sandwich format, which relieved some pressure to ‘perform’. The owner of the student artwork that was critiqued by me then got to choose the artwork they would like to critique. The pattern continued, with the next to choose and provide feedback being the artist whose artwork was just previously critiqued. This ensured that everyone participated, and chose *artwork* to critique and not *people* to critique. I started each new artwork critique with a jumping off point, such as, “What drew you to this artwork? What do you think the artist is trying to communicate to their viewer? Which part of this artwork is the most successful?” I then prompted students to expand on their comments by asking, “What makes you say that?” This encouraged commenters to provide evidence or reasoning behind their opinions and feedback. Once the individual person gave their critique, I opened the discussion up for the rest of the class to contribute. After an appropriate amount of time we moved on to the next artwork. This can be a difficult time for the owner of the artwork being critiqued. It is common for the artist to want to answer any questions being posed, or interject with defensive explanation or excuses for creative choices. This is potentially the most challenging portion of the whole class critique, yet, as one student puts it, whole group critiques

help, “so I can get my art to look better for next time.” As the facilitator it is important to keep the critique on topic, and remind the artists of their role as a listener and observer so as to understand how their art may be perceived and viewed by others, in order to grow as an artist in the future.

**Formal summative self evaluation.** Boud (1995) states that assessment by peers, teachers, or others with expertise are all regarded considering one’s own assessment. Peer, teacher, and expertise assessments are useful and may regulate learners’ access to future learning opportunities, but “unless they inform and help develop a learner’s ability to self assess, they are of little educational value. Ultimately it is only the decisions which learners make about what they will or will not do which actually influence the outcomes of their learning” (Boud, 1995, p. 15). Summative self evaluations are conducted at the end of each project supplying students with closure to the art process and time to reflect on their experiences. These evaluations are formal in nature, meaning they require dedicated time, may incorporate some form of grading, and push students to move beyond the “because I like it that way” statements and reflect upon their own work, articulating what they have learned, thereby developing the necessary vocabulary to express their thoughts (House, 2008).

**Rubric.** Rubrics are common with teachers as a way to grade. Analytic rubrics are prominent, where criteria is broken down into characteristics, or in many cases, specific learning goals or targets which were presented in the lesson (Hare, 2016). These types of rubrics typically use a grid with various levels of growth listed across the top of four or five learning targets. Rubrics come in many forms and are a great way to make sure students understand the expectations of each assignment, and as a component of self assessment (Slinkman, 2017a). Slinkman (2017a) describes a variety of rubric types, including: (a) the general rubric, which

simply defines characteristics of a successful artwork in general terms such as technique or craftsmanship to communicate a broad understanding of what makes “quality” work. It can be used over and over again because of its general terms; (b) task specific rubrics, which clearly define the criteria for each assignment so that students can use this rubric to assess their success very easily. Also making grading easier for teachers, because of its specificity. However it can be time consuming to create a new rubric for each assignment; (c) the analytic rubric, described earlier, breaks down each aspect of the task being evaluated in order to assess each criterion separately (e.g. a lesson on landscapes would break the rubric into foreground, middleground, and background, etc); (d) holistic rubrics, lump separate criteria together to make grading simple for teachers, yet because it does not break down the task into separate criteria (i.e. instead of separate foreground, middleground, and background scores, all three would be clumped together in a single score), students might have a hard time seeing where they can improve when assessing their work; (e) the single point, which is similar to an analytic rubric, where the expectations for the assignment are defined separately for a successful work, except the criteria are only described for proficiency. If the work falls above or below proficiency then there are blank spots available for the teacher to assess work and give individual feedback for each student. The single point method is very useful for teachers, but does not help students adequately assess themselves since there are no explanations beyond basic proficiency (Slinkman, 2017a).

The pitfall of many teachers is that they use rubrics alone and the feedback they intended to provide is then ignored by students because it feels impersonal and conforming (Hare, 2016). When using rubrics with my 7th and 8th grade students I used them in connection with some other form of self assessment, most commonly reflective questions. Though rubrics can seem

dull and overused they can still be utilized successfully as a student self assessment component. At the conclusion of the each art project during the study, and after some form of peer assessment had already taken place, I set up devoted class time for students to self assess in order to wrap up the project, and provide closure of the art process. When students first view a self assessment sheet they may be overwhelmed with the expectation of a large written response and see it as a test, instead of a tool. I remind my students before starting of the intention of self assessment to make them aware as artists of what they have accomplished, good and bad, in order to grow and develop skills and understanding in the future. However, I also included an element of grading to act as a motivator for those who have not yet bought into the self evaluation process without some form of reward. The rubric also allowed me to then grade projects quickly and efficiently, since most student assessments match my own. I chose to read the directions out loud to my classes, so that there was no confusion of instructions. I read, “This is your chance to evaluate yourself. Did you follow the guidelines of the art project? Put an X in the box that best represents your effort and ability, then answer the questions at the bottom.” I provided an analytic rubric format with task specific criteria at the top of the summative assessment sheet, before students were to answer reflective questions and demonstrate their knowledge of project specific vocabulary and concepts. I supplied a table with project specific criteria listed down a column (e.g. time management, use of hand building techniques such as slab, coil, and pinch, utilization of score and slip procedures, and glazing craftsmanship.) Along the top of the table I listed a row of progressive levels of proficiency with corresponding points (e.g. 5pts- Yes! I gave extra effort!, 4pts- Yes, I gave full effort. 3pt- Sort of, I gave okay effort, 2pts- Sort of, I gave little effort, or 1pt- No, I gave poor effort.) I made sure to read each section aloud. By thinking about their effort and corresponding results in each category they were given

a snapshot of their overall achievement results. This alone, would not be very beneficial for struggling students, or those who are too hard on themselves. A rubric is too vague to build any lasting self efficacy for future projects. However, as two of my students pointed out, it is a quick generalization of where they have landed on the grading scale, “I can grade myself to see how I would do,” and, “[an] X in the box: I see each part I did good at, and some parts I can work on,” in order to then respond to and explain those rubric grades during reflective questions.

***Reflection questions.*** Often used in correlation with rubrics, summative reflective self evaluation questions intend to create clarity and appreciation of the art process journey students have just concluded. Using reflective questions at the conclusion of an art project builds development of an interactive process which requires students to look at where they have been, where they currently are, and where they might want to go (Yang, 2017). Yang (2017) recognizes that pausing to reflect holds immense value by allowing students the time to understanding how they have gotten from point A to point B before moving on to the next assignment, which in turn builds cognitive functions and processing. When designing reflective questions for students to answer as a part of their summative evaluation, it is useful to incorporate higher order thinking. Students may be asked to answer questions in this order – What did I do? What was important about it? Where could I use this again? Did I see any patterns emerging? How well did I do? What should I do next? Seeing the process unfold on their reflection sheet reinforces that progress is being made and solidifies understandings of technique and skill creating tangible documentation of their individual art process (Yang, 2017). Reflective evaluations also include a component of topic specific vocabulary review. Boud (1995) agrees that the “development and appropriate use of vocabulary for learning in any subject area is a necessary part of self assessment” (p. 31). Students who are able to successfully

articulate their opinions and responses to their artwork are more able to build their artistic skill of reflection, which is part of the larger creative process (Yang, 2017).

The use of reflective questions with my 7th and 8th grade students took practice. As described earlier, I incorporated rubrics and reflection together as a summative self assessment package. Students first completed a rubric of specific skills or objectives, and then elaborated on their experience by answering questions intended to help them review their experience reflectively. Questions included; what was your favorite part of your project and why? What challenges did you face and how did you deal with them? Did you utilize any strategies to help you work through your challenges? Are you satisfied with your effort and results? What did you learn about yourself by completing this project? Explain how this knowledge or skill will potentially help you on future art projects?

I chose to read each question aloud to my classes, and I gave a variety of responses. I explained that there were no right or wrong answers, as on a test, (because I was interested in their opinions on the experiences), however, there were such things as comprehensive or incomplete answers and it was important for them to recognize the difference. My responses ranged from vague sentences (e.g. I liked my sky. I didn't have any challenges, but I don't like the grass part. I could use this again if I have to make a sky again), to full and enriched reflections (e.g. Having to precisely measure out a grid was a challenge for me because it was a new skill. After messing up a few times because I didn't double check my ruler marks, and pushing too hard with my pencil, I chose to turn my paper over to the clean side and try again. This time I used a yard stick instead of a ruler because it was bigger and able to fit across my paper. I had a friend double check my marks, and I made my pencil lines really light in case I had to erase. Now I know to slow down when it comes to technical parts of my project,

otherwise I'll waste time redoing it over and over again.) My example responses utilized art vocabulary, both subject specific and project specific, and followed a thought process format. Though my thorough examples may have seemed long winded at first, it was important for me to give a well rounded answer that demonstrated how to structure a reflective response. (That is - What happened? Why was it challenging? How did I fix it? Strategies? Then what happened? Why is that important for the future?) I wanted students to understand that by following a 'road map' of reflection they were able to break down any challenge and realize why it happened and how to potentially fix it in the future. In the words of a 7th grade artist, she enjoys "end of project reflection because I am able to really think about what I succeeded in and what I could improve on. I also get to think about what techniques I learned or could improve on."

When introducing reflection question on the topic of challenges for the first time, I knew I needed to repeat that I was not asking students to tell me what they did not like about their art, as is their urge. Many adolescent students have a hard time applying reasoning for lack of success in a particular skill (like realistic drawing) and resort to labeling the artwork 'bad' simply because of a challenge they were unable to overcome because of a lack of strategy use, effort, or missteps. I reiterated that I was more interested in how they approached a setback and acknowledged the difficulty, rather than defeatist remarks. Each new project conclusion brought another opportunity for reflective questions, and I continued to read the directions and questions aloud for each summative assessment, as is the needed accommodation for many of my learners. I allowed students as much time as they needed to reflect and write their responses, and circulated the room to help guide students through the process. Students in the beginning stages of self evaluation experiences may need help identifying their challenges, remembering how they reacted, and deciding why that was important to reflect on. One student sums up her ideas on

summative self evaluation by stating, “I feel that with self evaluation the person that created the art piece knows which part was the hardest to do and would appreciate that part more.” That was my hope, as well.

## **Results and Findings**

My study on the use of peer and self reflective evaluations in my middle school art classroom produced a variety of results and finding. In the following section I examine the results of implementation, and provide my scrutiny of the findings. I then review the results in light of my professional opinion and experiences with my adolescent artists. It should be noted that because of scheduling conflicts and overall classroom differences in time management paces, 7th grade students were able to complete more projects throughout the duration of the study, resulting in more data, results, and potential room for growth, therefore more discussion surrounds this class. This distinction revealed the importance of repetition and practice for adolescents, as 8th grade students did not show the same level of appreciation, participation, or development in peer and self assessment techniques as their 7th grade counterparts, likely because of less exposure and experience. Student examples, responses, and input on various assessment components are included to expand and supplement the data.

**Informal formative self and peer evaluations.** I observed overall growth in both 7th and 8th grade classroom climates, positive interactions, and feelings of general artistic self confidence after the use of formative self and peer evaluations such as the sandwich critique, sticky note critique, table conversations, and goal setting. Because of 8th grade limitations explained above, my 8th grade class was only able to develop basic improvement in their peer feedback and self reflection skills. They still showed signs of progress, particularly in their peer feedback responses using the sticky note critique method. At the beginning of the study the

majority of responses were plain, such as, “I like how you made them out of slabs and yours turned out and looks really cool,” leaving students underwhelmed and adding no real value to the exercise. Through repetition, 8th graders did start to develop more comprehensive judgments like, “You did an amazing job! I think you did an excellent job on creating each cactus differently and how the color pops. Next time maybe spend more time on painting them, but you still did a great job. Last thing, I enjoy that you created something that you could use daily.” More complete peer feedback responses gave meaning to the exercises and therefore students valued peer input more. These examples are just a sample of the development of peer feedback for the majority of 8th graders. Eighth graders participated in the evaluation techniques when it was mandatory, and did not have the opportunity to fully adopt each method into independent use and routine, and so complete understanding of their growth and efficacy belief is not exhaustive.

Seventh graders, however, were able to participate in each activity repeatedly and so form a better representation of student results. Introductory peer feedback at the beginning of the study produced a high level of success right off the bat. Students showed willingness to give complete, albeit short, sandwich critique responses such as, “1. Shading the mt. [mountains] 2. Making coconuts less dark. 3. The field out front.”, “Successful: blending skills. Edit: maybe you could paint on the sides of the canvas. Favorite: sky, it looks so real and textured.”, and “1. Space was used successfully. 2. It could use some trees. 3. I love the fact that you used a bunch of colors instead of having like one main color.” Students were able to understand and use the format correctly after initial teacher demonstration and classroom practice. As the study progressed students’ skills developed and they frequently expanded their responses. For example, “I love the use of chalk pastel. It made the colors blend together and stand out. One

thing I would do is use more of a variety of materials. The dog was very detailed and the coloring on it looked very life-like,” and, “[Your] trains turned out really well. They seemed very real and the grass had many different shades of green in it. The sky could have more detail in the stars, but I could tell right away it was Starry Night!” Students also added feedback that spoke to the artist’s intent and meanings behind creative choices, such as, “The dog showed how loyal you are,” and, “It seems that your tiger took time and that is appreciated.” Because of their high exposure to different techniques 7th grade students were able to build the necessary self regulatory skills to eventually implement evaluation techniques independently. This deeper level of peer feedback was highly valued by students, and I found that students would seek out particular peers to evaluate their artwork, knowing they would receive high quality and meaningful feedback. This in turn inspired others to improve their own ability to give feedback to peers. Overall, 7th grade students responded positively to peer assessment techniques, one student commenting, “[Peer evaluation] helps me because I can touch up and change something if it needs fixing. In the end, I like to peer evaluate to see what I can do better next time.” Another 7th grade student said, “I feel most confident when people encourage me. It makes me feel like I can achieve my artistic goals.”

When asked their preference between summative or formative evaluation techniques, the majority of students preferred to use assessments during the course of each project, stating that, “I liked talking about our art throughout the project because then you can improve on your art instead of forgetting what the suggestions were.” Though 7th graders ranked the sticky note critique at the top of their preferred list, in my observation, students in my 7th grade class utilized independent table conversation exponentially more often. I believe they did not even recognize they participated in self and peer evaluations, but thought that they were just having ‘normal

conversation' with friends. In my opinion, formative peer table conversations clearly had the biggest impact on my classroom climate and the environment of collaboration in my art room.

Goal setting was also viewed, both by students and myself, as the most impactful *self* evaluation tool. Sixty percent of 7th graders also chose daily goals as their favorite self assessment technique. A common phrase goes, 'How do you eat an elephant? One bite at a time.'" Students were able to successfully apply this concept by utilizing daily goals and were less overwhelmed and able to manage their time wisely. The informal aspect of daily goal setting also provided students with a way to monitor their own progress towards a larger end goal, and keep their self efficacy in tact with each goal achieved. By acknowledging their accomplishments (however small) students were able to remain positive, and then take more responsibility for their own learning, resulting in a sense of value in what they were creating, and higher motivation.

**Formal summative peer critiques.** Out of the two summative peer critiques used in my 7th and 8th grade classes, the gallery walk was surely the most successful. "I like the gallery walk," said one student, "because you get to see everyone's work and everyone can see your work and give feedback and you get feedback from people you wouldn't normally." Students responded positively to the method and valued the input from multiple peers at once. "I like peer evaluation because then I get other people's opinions on my project. What makes me feel the most confident is a finished good project," said a 7th grader. All students were required to participate, yet the gallery walk still provided a level of privacy, which I think students appreciated. I noticed as students circulated the room during gallery walks they were able to have mini conversations with surrounding peers before they wrote their individual responses to the artist. Students talked about the pieces with each other, commenting on craftsmanship and

shared opinions. It was enjoyable to watch students' reactions to artwork; curiosity, gasps of surprise and awe, and genuine admiration for beautiful results from unexpected peers. These informal assessments that took place before writing on individual gallery walk papers, demonstrated the positive community within my art room. The gallery walk seemed to have a nice balance of formal and informal properties; expectations of feedback were reasonable, students were comfortable with teacher facilitation, and they were able to move around the room for a level of freedom. With continued practice, I foresee my students fully accepting this as an assessment tradition in my art classroom.

As successful as the gallery walk was in my classroom, as a way for students to provide summative feedback to their peers, the whole class critique should not be disregarded. The whole class critique was not popular, especially with 8th graders who only participated in a preliminary experience, and so were not able to accurately judge the usefulness of this critique. Seventh graders were able to participate in whole class critiques four times throughout the study and were more able to provide reliable reactions to the method. Though it was not favored, I believe students were still able to gain a different perspective of their artwork and others' that would not have been possible without having public conversations. The benefit of a whole class critique was overlooked by students perhaps because of their adolescent immaturity and insecurities. My expectation was that students would appreciate this critique method more than they did because it alleviated the need to write, which is a stumbling block for many. However, many students were held back from providing authentic responses because of 'stage fright' like symptoms of expressing their opinions in front of the entire class. I however believed students still needed to be exposed to situations outside of their comfort zone, like the whole class critique, because students will encounter these situations both in future courses and in their

professional lives. Creating safe exposure to ‘public’ critique within the environment of my art classroom was a way to slowly prepare them for intense situations they might find themselves in the future.

I chose to adapt the whole group critique method, and experimented with students participating in small groups instead of the entire class. This was much more successful for my 7th graders, as the pressure to perform was relieved. I then further adapted this technique by implementing it as an optional formative assessment, knowing that my students responded best during these previous methods. I found a dramatic switch from tight lipped, sulken teens, to curious, helpful peer assessor. Many students even remarked that it was their favorite technique. “My favorite thing to do is to put my project on the board and evaluate myself,” said a 7th grade student. The whole group method requires teacher patience, and will need to be practiced more than others in order to be accepted by my students, however simplifying the method into a *small* group critique, with the same format was a successful compromise for my adolescent artists.

**Summative self evaluations.** Rubrics and reflection questions provided a lot of information to digest. Rubrics, as expected, did not make a big splash, however they were viewed as an easy tool to grade performance, (which they accurately are). Referring to the grading aspect associated with rubrics, one 7th grade student commented that he liked this style of self assessment because he could, “know what it is [and] face the facts.” Another 7th grade student agreed that rubrics were a quick way to gain a snapshot of their summative results because, “I like to set out and kind of see what I did,” before having to expand and explain through reflection questions. “Fun,” commented a 7th grader, “and still gets the job done.” Rubrics effectively worked to grow accountability by presenting my students with a graded outcome attached to their self assessment of effort and results.

I was surprised, however, by how many of my students had a difficult time viewing the summative reflection questions as anything other than a test. Boud (1995) recognizes this difficulty as a potential response to too many classroom assessment tasks that are put into artificial or unfamiliar contexts (not relating to anything students might realistically encounter in the future, except more assessment tasks), and then graded by teachers with vague scoring scales and feedback given too far after an assignment to be applicable. Seventh graders may view reflection questions as, “long and very boring.” These common assessment circumstances made it challenging for many of my students to gain meaning from the experience, and made me wonder, much like Boud and Falchikov (2006), if this should lead educators to question if the term assessment has been so contaminated and associated with actions that students wish to avoid, that the idea of becoming a lifelong assessor is unimaginable for them (Boud, 1995). Though I tried to thoroughly explain to my 7th and 8th graders, that their assessments were an opportunity for them and me to understand more about their intentions and experienced, this was a hurdle. It was challenging to help my students view the summative self evaluation as a tool, instead of a test.

The best results, and more open student participation happened within my 7th grade classroom, with students who showed higher self efficacy beliefs, and had already bought into the self evaluation premise. “My favorite use of self assessment is when I can see how far I’ve come with my project,” said a student. They were able to see the benefits of reflection, and so used the questions as a chance to improve, which resulted in even higher motivation on subsequent projects. “I go into the project not very confident, but build confidence over time,” commented a 7th grader. This student furthered, “Reflecting and talking about art at the end and throughout helps because you can get tips on what to improve or what other people like about

your art, so you feel good about it.” Students who had a positive mindset to begin with gave more comprehensive responses, and were less apprehensive to point out their own faults. “If everything is successful it doesn’t teach me or help me learn new things,” mentioned a 7th grader with high self efficacy beliefs.

Students with low self efficacy, either did not see the value in self evaluation, so their responses were limited, or they focused too heavily on negatives. “I faced the challenge of shading...I have learned that I am not a very good artist,” commented one student who had low self efficacy beliefs. I noticed a trend when students reflected on their success and challenges. Students were able to explain their favorite parts of their project and the many successes they achieved, but when the topic of challenges was presented students often interpreted the question as “what was I bad at?” I found that it was then important to exhaustively discuss what challenges are, and why it was necessary to reflect on hardships during a project. Promoting a positive and constructive mindset during reflection is imperative. After repeating that a challenge is not always a negative, but rather a difficult experience with the possibility of various results (some successful others unsuccessful), I was able to see a growth in student understanding. By showing students how to analyze the challenge and look for reasons why the results were successful or not, students could then see how future applications could be adjusted. Reflection on challenges required more teacher demonstration and individual conversations, especially with students who exhibited low self efficacy. Automatically equating an unsuccessful result with doing ‘bad’ was not desired. I had to encourage students, especially those who initially showed low efficacy, to view a lack of success as a lack of adequate strategies or effort. It was essential to explain how students could then be prepared if that challenge was ever presented again. I was encouraged, though, by the beginnings of growth in some students

who exhibited low self efficacy, such as the student who previously believed they were, “not a very good artist,” because they struggled with shading on a particular project. This student was presented with shading challenges on a future project. After practice in self evaluation and exposure to mini mastery experienced through peer and self formative assessments, she reflected on her experience saying, “I faced the challenge of shading my horse in this project. I fixed this problem by asking people’s opinions about my shield and making corrections... generally I think that I’m good at art and enjoy doing it.” This student continued, by stating that self assessment helps build “better results in projects and better work.” With continued experience I believe other students with low self efficacy will build their openness to self evaluation, which will in turn build their confidence to reflect honestly about their artistic experience, and support higher motivation and achievement.

## **Discussion**

I introduced four informal evaluation techniques into my classroom: the sandwich technique, sticky note method, daily goal setting, and mid-project check-ins in the form of table conversations. Each technique had potential to give students formative feedback on their artwork throughout the creative process, in order to aid them in then making creative judgment of their own work. Bayles and Orland (1993) claim that students will “abdicate artistic decision making to others when [they]... fear that the work itself will not bring... the understanding, acceptance and approval they seek” (House, 2008, p. 50). Art teachers have all heard students ask, “is this good enough?” or “is this what you want?” These phrases are the antithesis of my goal as an art teacher. Through the use of formative evaluation techniques I wanted students to take ownership of their creative decisions and resulting artwork. When planning evaluation techniques to include in my study, I intentionally chose to incorporate more informal formative

evaluation techniques than formal or summative ones, in order to help my students recognize the ease and routine of self regulation, building a sense of control over their learning. I spent a lot of time demonstrating these formative techniques in order to give students solid examples of expectations, and a strong foundation to emulate. It is impossible for student to tell if the work considered is adequate, unless they know what counts as good work (Boud, 1995).

I wanted students to have the ability to perform these self regulatory acts in the future, even outside of my classroom with a teacher who does not enforce a classroom critique or provide designated time for reflection or peer feedback. I was confident having an arsenal of techniques on hand would help my students find the method that worked best for them. I noticed in my adolescent classes, it was easier to implement these peer and self assessment techniques with my 7th grade class. This could be due to the classroom dynamics already in place, or the make up of personalities, however I believe it was largely because my 7th graders had more opportunities to practice these formative techniques and become comfortable with communication surrounding their art. Seventh graders worked at a faster pace, and had fewer scheduling interruptions, which gave them the chance to conduct more assessments. Feedback from peers can provide endless opportunities for change or adaptation within the art classroom, and 7th graders took advantage. As their familiarity with techniques grew, the frequency of independent use grew.

One of my biggest takeaways from my study, is the positive impact of formative evaluation techniques. Students were most responsive to formative, and informally conducted peer and self assessments. I believe this is because these assessment techniques put the focus on things that students were still able to change. They did not feel locked into their creative decisions, and forced to accept comments and opinions after the fact. Like Austin (1999) noted

earlier, students were indeed less protective of their work when it was unfinished. I did not sense as much fear attached to these peer interactions, also perhaps due to the casual usage. These formative assessment experiences gave students feedback which then translated into compounded mastery experiences. Students acknowledged, in line with the literature, that mastery experiences were the best way to develop their self efficacy, and it was apparent in my art classes. Because of my observations, and responses from students, I have come to the conclusion that informal formative evaluation techniques best suit my adolescent artists as a way that promotes healthy assessment interactions and raises student motivation and confidence in their ability to successfully complete their art projects.

Although summative assessments were not as popular as formative evaluations in my particular middle school classroom, summative assessments still provided a comprehensive use of reflection in the art room. The two summative *peer* critiques that were incorporated into my middle school art classes were the gallery walk and the whole class critique. These two techniques were formally implemented and required intentional class time, teacher organization and facilitation, and thorough responses and participation from students as an entire class body. By including a sample of formal critiques (meant to be used at the conclusion of project) I wanted to show students the power of devoted conversations surrounding finished art, and the difference between feedback given in-progress compared to feedback given at the end of projects. There is a phrase, ‘the artist’s work is never done’. Hearing and digesting the opinions of others at the end of projects can open students’ eyes to their successes and failures where they might have been unaware before. Though the student artists presented ‘finished’ pieces, the feedback from peers through intentional feedback, could help them re-evaluate how ‘finished’ their work really was. Also, formal critiques challenge peers giving the feedback to analyze and

look deeply into artwork, in order to successfully communicate their judgments and observations in respectful and constructive ways. It was just as important for my students to learn how to give meaningful feedback and it is was for my students to receive meaningful feedback.

Self evaluation at the end of projects has also been established as a necessary routine in my art classroom. I chose to introduce two summative self evaluation techniques to my 7th and 8th grade students; rubrics and reflection questions. Both techniques were paired together on one assessment form, and followed at least one of the previously discussed summative peer assessment techniques. I would argue that all of the assessment techniques implemented throughout the study incorporated an aspect of reflection, even if not specifically addressed, but I wanted students to also experience self assessment techniques that required devoted attention to introspection. I acknowledge that I was only able provide an initial experience with summative self evaluation reflections for my students, particularly my 8th graders who are no longer under my care. Yet, with more practice and immersion in self evaluation and a goal of reflection and growth, even my surly adolescent students could successfully build an appreciation of the assessment process. I was happy to create any spark of progress. Overall, I believe that developing reflective skills by using self assessment practices must always have the goal that students themselves can learn to accurately evaluate for themselves what constitutes good work, and be given opportunity to practice this skill, in order to promote lifelong learning (Boud & Falchikov, 2006).

### **Current and Future Benefits of Research**

Through my review of the literature, application of evaluation techniques in my own classroom, and the study thereof, it is apparent that myself and other art educators have an opportunity to help students achieve higher success and development as independent learners

with the use of peer and self assessment. As Simmons (2001) points out, reflection sheets, interview forms, journals, etc., all “help teachers, parents, and administrators trace the evolution of particular ideas as well as general progress over time” (p. 21). Other art educators can benefit from this research by implementing successful teaching strategies that encourage their students to think reflectively about their own work, which will provide valuable clues to the teacher about how deeply their students have understood the assigned tasks, and this information can improve their teaching and their students’ learning (Thomas et al., 2011). The various critique methods described and then discussed in my study provide fellow educators with examples of critiques, which are a means of assessment, to evaluate understanding, and they provide a way for teachers to identify and then correct any technical or aesthetic problems (House, 2008). My own current classroom climate has developed into a more student-led environment, which increases both the accountability and sense of freedom in my students. This removes some pressure from my own teacher shoulders, and allows me to better manage a busy, creative, middle school classroom. I am also more aware of how students will respond to each assessment technique, and therefore I am able to utilize each assessment technique when best appropriate for future students.

The research I conducted on the use of peer and self evaluations in my middle school art room also documented my students’ progress in developing peer and self assessment skills, which benefited them with a better understanding of their own learning, and higher motivation and confidence in their abilities to accomplish tasks in the art room, which led to greater achievements. Students also benefited, and will continue to benefit, from the conducted research on evaluation techniques which increases experience in art critique and appropriate communication with peers. As House (2008) explains, “Critiques provide students the opportunity to use new vocabulary and understand terms as they evaluate their work and the

work of others. Critiques help students develop and refine their own practice. They can offer constructive criticism as well as offer validation of a student work” (p. 51). The peer and self assessment activities used throughout my study proved to be effective tools used to enable my students to combine a wide range of their learning, to reflect on their accomplishments, and to examine the implications for further learning (Dochy et al., 1999). My students, and others who utilize self and peer evaluation, will benefit through their enhanced status in the learning process, specifically by an awareness that they are agents of their own learning, and the realization that their opinions matter.

The data I collected validated the implementation of peer and self evaluations as a credible way to enhance the art experience, and built confidence and self awareness in my middle school art students. Though I only scratched the surface of what might be accomplished with long term use and research into peer and self evaluations it was clear that providing my students with an awareness that their opinions are being considered enhanced their morale involvement and ultimately their motivation. Students benefited with a better self concept, including higher self efficacy beliefs, and the ability to identify personal successes. When my students were encouraged through assessment activities to think positively about their learning they were helped to see the value in what they were creating, which led to increased responsibility and acknowledgment of their role in the learning process, and motivation for higher achievement (Boud, 1995; Broadfoot, 1979).

## CONCLUSION

“Reviewing work done in the past, comparing it to work done in the present, and projecting from this possible routes into the future, can provide momentum to even the most recalcitrant middle schooler” (Simmons, 2001, p. 23). This paper attempted to demonstrate

Simmons' (2001) sentiments by first reviewing selected literature published on self assessment, peer assessment, and their link to self efficacy beliefs, followed by sections discussing the applicable techniques and benefits in my own middle school art room. The purpose of my study was to demonstrate the positive results of peer and self reflective evaluations and verify the authenticity of a variety of evaluation techniques through my own experience and implementation. I agree with Boud's (1995) statement, "By carrying out clearly defined reflective activities before, during, and after lessons, learning from experience can be enhanced" (p. 33). There were, however, innumerable peer and self evaluation techniques to choose from and even more ways to implement these techniques into the art classroom. I only intended to explain and provide a spotlight for a few specific techniques in order to encourage other art educators to reflect on how they might integrate self and peer assessment within the framework of their own classrooms. I would never wish to restrict other teachers' creativity. Through research and classroom use I learned that both peer and self assessment play an important role in drawing meaning from experience (Boud, 1995). Peer assessment methods should allow art students to practice making reasonable and constrictive judgments about peer artwork and the extent to which they have achieved expected outcomes, and self assessment methods should incorporate sufficient degrees of flexibility to allow students of different artistic backgrounds to benefit from them with regard to their prior experiences (Boud, 1995; Thomas et al., 2011). House (2008) reminds educators that our role as the teacher is to define the purpose of the each evaluation technique, provide expert knowledge for students to reference, and enable the learning process by maintaining an emotionally safe environment so that students are free to express themselves. By providing an art room atmosphere of trust, students are more open to receiving constructive criticism as well as praise (House, 2008). The ever changing attitudes, apathy, and

adversity of adolescent artists will continue to make the art room a complicated and difficult place to teach, however the resilient art teacher will continue to make art class an opportunity for adolescents to achieve a sense of mastery and build self efficacy beliefs (Simmons, 2001). McTigue and Liew (2011) expertly explain that “helping to increase adolescents’ social-emotional and self-regulatory skills can help them maintain self-efficacy and a positive sense of self during a period when adolescents are experiencing major transitions at school. Ultimately, such effort may positively impact students’ academic as well as social-emotional lives” (p. 118). Through this process of increasing social-emotional and self regulatory skills by utilizing peer and self reflective evaluation techniques, each art student has the potential to recognize their growth, which can help promote a positive mindset and justifiable self efficacy. As one of my 7th graders learned through her immersion in self and peer evaluations, “I’m confident [now], and I know if I do mess up I can fix it.” I was encouraged through my review of the literature and in addition to my practical application of peer and self reflective evaluations in my middle school art classroom, to continue use such techniques because of these potential benefits to my adolescent art students. As Simmons (2001) summarizes, such positive feelings do not necessarily “ensure a life-long love of art, or even ongoing good behavior in the classroom, they are nonetheless important foundations for both, and so essential elements at all levels of art education” (p.23).

## APPENDIX

### A. Human Subjects Institutional Review Board Letter of Approval and Renewal

WESTERN MICHIGAN UNIVERSITY



Human Subjects Institutional Review Board

Date: September 2, 2016

To: Christina Chin, Principal Investigator  
Mary Garrod, Student Investigator for thesis

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number 16-06-05

This letter will serve as confirmation that your research project titled "Peer and Self Reflective Evaluations: Benefits and Techniques Used in a Middle School Art Room Setting" has been **approved** under the **exempt** category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may **only** be conducted exactly in the form it was approved. You must seek specific board approval for any changes in this project (e.g., *you must request a post approval change to enroll subjects beyond the number stated in your application under "Number of subjects you want to complete the study."*) Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

**Reapproval of the project is required if it extends beyond the termination date stated below.**

The Board wishes you success in the pursuit of your research goals.

**Approval Termination:**

**September 1, 2017**

1903 W. Michigan Ave., Kalamazoo, MI 49008-5456

PHONE: (269) 387-8293 FAX: (269) 387-8276

CAMPUS SITE: 251 W. Walwood Hall

HSIRB Project Number: 16-06-05

**SUBJECT RECRUITMENT**

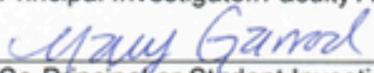
15. Have research subjects been enrolled (or subject records, specimens, etc. obtained)?  Yes  No  
**Provide a letter of explanation if no research subjects have been enrolled (or subject records, specimens, etc. obtained).**
16. Total number of subjects approved in original protocol: 50
17. Total number of subjects enrolled so far: 28  
If applicable: Number of subjects in experimental group: \_\_\_\_\_ Number in control group: \_\_\_\_\_
18. Estimated number of subjects yet to be enrolled: 4

**Please remember to include a clean original of the consent documents to receive a renewed approval stamp.**

**INVESTIGATOR'S ASSURANCE**

I certify that the information contained in this HSIRB Application for Continuing Review and all attachments are true and correct. I certify that the research has been and will continue to be conducted according to the protocol as approved by Human Subjects Institutional Review Board. I agree that I will not implement any changes in the protocol until such changes have been reviewed and approved by HSIRB. If, during the course of the research, unanticipated risks or harm to subjects are discovered, I will report them to HSIRB immediately. I agree to follow all applicable federal regulations, guidance, state and local laws, and university policies related to the protection of human subjects in research, as well as professional practice standards and generally accepted good research practices for investigators

If this is a FINAL REPORT you may return the form electronically (signature is not required).

 _____ Principal Investigator/Faculty Advisor Signature	August 17, 2017 _____ Date
 _____ Co-Principal or Student Investigator Signature	August 21, 2017 _____ Date
_____ Co-Principal or Student Investigator Signature	_____ Date

**Approved for a one-year extension by the HSIRB:**

 _____ HSIRB Chair Signature	8/29/17 _____ Date
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