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Fostering the Efficacious Adolescent Artist

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FOSTERING THE EFFICACIOUS ADOLESCENT ARTIST

by

Regina Beltowski

A thesis submitted to the Graduate College
in partial fulfillment of the requirements
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Thesis Committee:

William Charland, Ph. D., Chair
Christina Chin, Ph.D.
Vince Torano. M.A.
FOSTERING THE EFFICACIOUS ADOLESCENT ARTIST

Regina Beltowski, M.A.
Western Michigan University, 2015

Low self-esteem and insecurity is common among adolescents. In the secondary-school art room, students often stop engaging in art practice, believing that they lack talent, when the truth is that they lack specific skills. Students who are fortunate to have teachers who help them develop their skills experience a boost in feelings of self-efficacy, and often reengage with art production. This thesis project focuses on strengthening students’ self-efficacy in the visual arts at the secondary level. Clarifying the differences between related terms – self-esteem, self-concept, and perceived control – I focus on self-efficacy as a characteristic that plays a significant role in educational success. I analyze why and how students acquire low efficacy in the arts by examining the stages of artistic development, and the influence of increasing knowledge of exemplary professional art. Finally, I offer practical suggestions for increasing artistic efficacy by emphasizing four pedagogical approaches: mastery of experiences, vicarious experiences, forms of persuasion, and physiological reactions.
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I would first like to acknowledge Dr. Ellen Jones for raising awareness to a topic I now feel strongly about, self-efficacy. She is the catalyst to my research, bringing my attention to predominant people such as Albert Bandura and Betty Edwards. I now have a richer understanding of the connection between social cognitive theory and art education.

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Regina Beltowski

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INTRODUCTION

Through teaching high school art, I have experienced over the years a variety of students, ranging on the spectrum from the eager to conquer the first project to the “foreclosed” adolescent. In generalizing the foreclosed, I often hear vocalizations of uncertainties, I can’t draw or I’m not creative! I observe them showing their frustrations in a multitude of responses, from flaunting their poor art skills to repeatedly starting over, crumpling, avoiding and erasing their work. Students have admittedly disclosed to me their sole reason for being in my class was due to a scheduling error or conflict. Some even share with me their unpleasant past experiences with art, leaving permanent scars and damaging views. I am not alone in this observation; Graham (2003) notes from childhood to adolescents, an increase of students surrendering the arts. Recalling my personal experiences as an elementary student, most of my peers expressed excitement for the arts. Over the years I’ve wondered, how do students develop doubt for the arts and what causes this shift?

Researchers in the field of art education have explored the decline of enthusiasm for the arts. Graham (2003) and Davis and Gardner (2000) describe the progressiveness of the decline. They examine this shift by venturing back to grade school. Stepping foot into an elementary art room, a teacher asks youngsters whether they consider themselves artists. The majority of students have their hands proudly raised. When asking the same group of students upon entering middle school, the number who identify as artists
decreases. Onto high school, the number continues to dwindle. A select few will go on and become professional artists in their adult years while most adults struggle to draw a remedial stick figure. How do the majority of individuals lose interest for the arts as they age? This is a paradox in education. Traditionally, it is believed with more school, exposure, and practice students can build skills in a select subject. Is this the case in art education?

**Charting the Decline**

If one were to graph the decline it would form the shape of the letter U. This phenomenon identified as the U-shape development hypothesized by researchers (Davis, 1991, 1993; Davis & Gardner, 1992; Gardner & Winner, 1982) has been reaffirmed by Davis (1997). According to Gardner (1980), when charting the progression of artistic development from childhood to adulthood, the data form a ‘U’ shape on a graph.

**Figure 1**

*The U-shape of Adolescent Artistic Development as Described in Davis (1997).*
Illustrated in Figure 1, a heightened symbolic expressiveness in childhood drawings is located on the first peak on the ‘U’. As children age and are exposed to more schooling, the aesthetic activity once observed in their younger years disappears, pushing their position into bowl of the ‘U’. This group of children range from eight to eleven years old. In some cases a rebound effect occurs in adolescents who identify themselves as artists. In later years they may develop into professional artists bouncing back to form the upper adjacent peak of the ‘U’. This rebound demographic makes up the few individuals who become adult artists. However, the majority of individuals actually create an ‘L’ shape, never regaining artistic expressiveness (Davis, 1997). This group includes both adolescents and adults who consider themselves non-artists. Interestingly, artwork produced by young children and adult artists, the two groups with the largest educational and age discrepancy show similar aesthetic expressiveness.

To validate Gardner’s (1980) theory, Davis (1997) compared aesthetic criteria that measured metaphoric and literal connections among art produced by children through adult artists. Participants all drew the same emotions, such as, happy, sad, and angry. Thematic constraints made the study cohesive, unlike studies conducted in the past. Similarities were identified between line and composition in drawings made by preschoolers and adult artists. It was concluded,

The demise of drawing from the flowing creativity at age five emerges from this research as the poignant loss of skills needed to articulate aesthetic understanding which continues to develop in spite of the individual’s inability to give it tangible form (p.155). The expressiveness generated in adult artist is noted for a metaphoric graphic quality. This quality is evident in young children’s art but it is because of their inability to
articulate representational likeness. The aesthetic drop which occurs in children’s art ages eight through eleven is due to their reliance on literal forms of representation.

**Cultural Context and Aesthetic Similarities**

It is important to note that the U-shape is not universal, nor are aesthetics universal throughout cultures. Davis’ research on Gardner’s U-shape theory has been criticized for lacking cross-cultural context. Praiser (1997) reexamined Davis’(1991) study of Gardner’s U-shape theory, and concluded, “Western judges with backgrounds in art do in fact see a u-shaped curve in the developmental mastery of some features of aesthetic expression in drawings by individuals of different ages” (Praiser, 1997, p.159). Praiser speculated that this would not be the case in cross-cultural contexts. To discover if cultural influences were universal, Praiser (1997) replicated Davis’ (1991) original study, with the addition of Montreal Chinese judges. Instead of evaluating artwork produced by U.S. children and artists, both Chinese and U.S. judges examined artwork from the Montreal Chinese community. Praiser (1997) replicated the same age groups as in Davis’(1991) original study ranging from preschoolers to adult artists and non-artists. The results showed vast discrepancies between the U.S. and Chinese judges’ aesthetic preferences. It appears Montreal Chinese judges weren’t as impressed by the work of young children as were the U.S. judges in Davis’ findings. The Chinese judges preferred mastery in skill rather than spontaneity. Interestingly, Praiser found striking similarities between Davis’ U-shape when U.S. judges evaluated the work of Montreal Chinese, “In fact, when superimposed upon Davis's original ucurve, the two curves appear to be almost identical” (Praiser, 1997, p.162). Comparisons can be drawn aesthetically in both adult art and art produced by children, however, the aesthetic values between these two
groups are subjective and cultural.

Questions are still ongoing if the u-shape theory holds value in explaining the artistic decline. It is apparent that further analysis is needed to sufficiently explain the sudden drop during later childhood. Davis (1997) brings to our attention the constant in these studies, “Regardless of abiding disagreements regarding the size and shape of the gift of artistry that young children bring to school, there is little disagreement over the loss by adolescence” (p.156). Can losses in aesthetic expressiveness lead to children losing interest in the arts? What are other factors that contribute to the decline separate from aesthetic expressiveness?

**Causes of the Decline**

The crisis period in artistic development identified by Edwards (1999) explains one cause to the artistic decline. However, artistic development in itself does not take into account social- and structural factors. Competitiveness and accountability in the American school system has led to high stakes testing causing a narrowed view of multiple intelligences.

**Standardization**

A singular priority is placed on cognitive intelligence while neglecting sensory intelligences (Amorino, 2009). Robison (2008) spoke directly about the dilemma schools are facing. In his lecture on changing educational paradigms, Robison (2008) said, “It's essentially about conformity and increasingly it's about that if you look at the growth of standardized testing and standardized curricula and it's about standardization” (p.3). Robison went on to cite a longitudinal study with 1,500 participants on divergent thinking; the ability to think of alternative solutions or ideas (Land & Jarman, 1992). In
this study, participants were tested on their divergent thinking abilities at the beginning of kindergarten. They were retested, as eight to ten years old and thirteen to fifteen year olds. The results were surprising: ninety-eight percent of kindergarteners, thirty-two percent of eight to ten year olds, and ten percent of the thirteen to fifteen year olds scored at the genius level. Only two percent of 200,000 adults were measured at the genius level. Robinson believes we need to move away from standardization and into cultivating creative thinking. Schools are losing sight of how valuable the arts are for whole brain learning.

**Negotiating Importance**

The value schools place on the arts contributes to both the adolescents’ and parents’ perception of the arts. Graham (2003) noted that adolescents felt social pressure to pursue traditional career choices, due to the perpetuating view that the arts are not a viable investment. Lowenfeld and Brittain (1987) noted schools with secondary art programs advised students to take academic courses over electives to prepare students for college admissions. As a result, adolescents are enrolling in more academic preparatory courses in high school, leaving fewer opportunities to fit the arts into their schedule. The resulting decline in arts enrollments can sometimes lead to the dismantling of high school arts programs, which further communicates to students that the arts are of little or no value. Graham (2003) noted an overall sense among adolescents that their art work was unappreciated. On the contrary, it is equally important to note that many schools have thriving art programs. Their community and administration sees the value of an education in the arts. Support for the arts in public education appears to be inconsistent across the nation given that half the schools are without an art program (Lowenfeld & Brittain,
1987). This could be due to the vast majority of schools focusing on meeting
standardized mandates and heightened accountability.

Finally, though schools’ curriculums can either contribute to, or delimit an
education in the arts, society’s view neglects to see its importance. Lowenfeld and
Brittain (1987) speak directly about society’s attitudes towards the arts. “The general
public may not consider art an important part of learning; society seems to have accorded
art courses a very minor place in the curriculum” (p. 435). Opportunities at school and
societies’ general view have devalued art education as irrelevant or an activity of the past.

Artistic Development

Adding to the decline are students’ perceived failures to capture their subject
matter realistically, thus, causing a drop during middle childhood artistic endeavors.
Davis (1997) explains that a developmental shift occurs when children ages 8-10 abandon
the “preliteral” stage and enter the “literal” stage (as cited in Gardner, 1980, 1982; Ives,
Silverman, Kelly, & Gardner 1981; Rosenblatt & Winner, 1988; Winner & Gardner,
1981). When children make this shift, they become more self-critical of their work, able
to notice aesthetic qualities in-representational drawing, but ill-equipped with the
strategies to improve likeness (Graham, 2003). As children pass through this period, they
become increasingly aware of what society deems “exemplary” art. Amorino (2009)
explains that “preadolescents retain the perception that "good art" is characterized by
technically astute, mimetic representation, and view this as an unattainable goal” (p. 214).

In addition, the reservation that art is for the talented, or fears of failure, steers
adolescents from enrolling in an art elective (Lowenfeld & Brittian, 1987). Even more
detrimental is the false assumption that if one is not express “talent,” they conclude their
future for the arts to be anything but successful. “It has also been widely assumed that once atrophied, artistic expression may not be resurrected, and that the continued pursuit of serious artistic learning is most appropriate for those adolescents who demonstrate outstanding abilities in the area” (Amorino, 2009, p. 214). To summarize, there are multiple factors that lead to the declining interest in art during late childhood and preadolescence. Opportunities at school, artistic developmental stages, perceptual failures, and society’s general opinion, all contribute to the decline.

**The Arts’ Role in Human Development**

The artistic decline is worthy of our attention in both the field of art education and the role of education in society. Adolescence is a time to explore one’s self and discover a personal purpose, while at the same time, physical, emotional, and cognitive transitions are at a high. The arts cater to the multisensory modes of learning among the sole-searching and self-expressive needs of adolescence (Amorino, 2009). “Artistic engagement naturally accommodates the needs of these individuals, who are seeking homeostasis and self-identity while experiencing a period of dramatic physical and emotional change accompanied by confusion, internal unrest, and unbalance” (Amorino, 2009, p. 215).

Researchers Catterall and Chapleau (1999) validated the integral role the arts play in adolescent development. Reviewing data gathered through a national educational longitudinal study of 25,000 secondary schools in the United States, they found that a high level of arts participation correlated with improvements in academic grades and performance on standardized tests, as well as with lower drop-out rates and fewer hours of television watching. The impact of high arts participation, while affecting students
across all income levels, was particularly strong among students from lower socio-economic backgrounds. They were able to conclude that there are substantial differences among students who participate in the arts and those who do not, ranging from academic performance to general attitudes and behaviors. Consequently, the arts can be said to complement adolescent development by facilitating competencies that help students sustain and thrive in a disorderly world.

**Preparing Adolescents for the Future**

Our world is indeed complex. The enormity of 21st century issues casts a dismal outlook for our future. The economic down turn of 2008 had a chilling effect on the American people that caused widespread distress and uncertainty. The stock market plummeted, the housing market collapsed and unemployment rates skyrocketed. Eventually all economic areas were impacted to some degree. The impact of the resultant recession reminded us of how unstable our economy can be. Add to this the ongoing global problems of international tensions, growing populations, depleted environmental resources, and social injustice, and it’s easy to understand why an adolescent might see the world as muddled and uncertain. As educators it is our responsibility to prepare our students to be able to navigate through the chaos, and learn the ins and outs of our complex real-world (Larson, 2011).

**Mindset**

The necessary competency for an individual to function both productively and successfully begins with their mindset. First and foremost, people have to believe that they are in charge of their own destiny: their learning, achievement, and attainment. In regard to mindsets, Dweck (2006) divides the population into two groups, learners and
non-learners, termed the growth and fixed mindsets. Individuals who have a fixed mindset blame the outcomes of situations on factors they believe are uncontrollable, such as, one’s perceived general intelligence, or how “good” they are in subject. They do so to protect a perceived core belief about them, such as, *I’m not good at art*, or, *I am not talented*. They are drawn to pursuits that validate their worth or in which they anticipate a successful outcome. For people with a fixed mindset, success is measured by making no mistakes, learning comes effortlessly, and challenge is their nemesis. They strategically avoid classes, activities, and situations that they believe they will perform poorly in. As a result, people who have a fixed mindset lose valuable learning opportunities; they reside securely in their comfort zone, in their perceived abilities and inabilities.

On the other hand, those who have a growth mindset view the world through strides and turbulence. They can manipulate their outcomes. They embrace challenge and do so to develop and grow; *I will take a drawing class to improve my drawing abilities*. Fortunately, Dweck, confirms that one can change their mindset. We need to teach our students that being “bad” at art is not a fixed entity; it can be developed as in any other subject in school.

**Setting Goals**

Larson (2011) offers a resolve for preparing adolescents to operate successfully in an ever changing world. Goal setting is a simple and profound solution to prepare students for a complex world. However, this resolution is not as simple as it sounds. Many people can relate to setting goals and not achieving them. Adolescents especially experience difficulty managing their goals, lacking the ability to employ effective task-specific strategies and the endurance needed to achieve a goal (Pajares & Urban 2006).
However, mindsets and goal-setting alone do not guarantee that positive growth will occur or achievements will be made.

**Goal Interference**

The difficulty with reaching goals is attributed to two human agencies, motivation and emotion (Larson, 2011). Larson describes the power of human emotion, “the anger, anxiety, and even joy that can arise in trying to reach a real-world goal can disrupt work, derail effort, and distort thinking” (p. 319). Adolescents are more prone to emotional extremes than adults (Larson, 2011). Larson claims, “To reach a difficult goal, you must devote sustained effort to it” (p. 319). For adolescents, regulating their emotions and maintaining motivation is essential to achieve a desired goal.

**Development of Personal Agency**

Influencing one’s motivation, achievement, and overall wellbeing is referred to as the development of personal agency. Pajares and Urdan (2006) define personal agency as “one’s capabilities to originate and direct actions for given purposes. It is influenced by the belief in one’s effectiveness in preforming specific tasks, which is termed self-efficacy, as well as by one’s actual skill” (p. 45). Self-efficacy is the foundation of one’s personal agency. Bandura defines self-efficacy as the subjective judgments of “one’s capabilities to organize and execute courses of action to attain designated goals” (in Pajares & Urdan, 2006 p. 47).

To combat the artistic decline, I propose developing methods to improve student’s self-efficacy in art. I hypothesize that efficacious art students will have heightened motivation and an increased desire to improve their ability. My philosophy is that everyone has the innate curiosity to learn regardless of the subject. Perceived failures
have contributed to the decline and have caused students to acquire low efficacy resulting in decreased motivation for the arts. The artistic decline is real and worthy of discussion not only in the visual arts, but in other life domains, as well. Teaching students they have responsibility and control in their learning is a lifelong skill to function competently in the 21st century. In order to seek solutions in increasing students’ self-efficacy further investigations will take place in defining efficacy and its role in education.

**Self-Efficacy**

The transitions from elementary to middle school, and middle school to high school, are challenging for students. For adolescents to achieve academic success they need to be able to navigate through increased academic rigor and negotiate the teaching styles and academic demands of multiple teachers across a range of subjects. In order for adolescents to succeed academically, they have to develop a self-regulated system to effectively prepare for tests, assignments, and projects in and outside of school. Such systems include student’s ability to self-evaluate, set goals, and self-monitor (Pajares & Urdan, 2006). These strategies assist in constructing students’ academic efficacy. The consequence for failing to meet the demands of school is an acquired perception of low self-efficacy. Diminished efficacy from academic decline has devastating effects on a student, shifting his or hers social relationships to peers who share similar low efficacy. Students with low efficacy can begin to develop an overall negative view about the school and its relevance to their future (Pajares & Urban) cited in (Steinberg, Brown, & Dornbusch, 1996). On the other hand, students with higher and diversified perceived efficacies elect to explore a wider range of experiences, and as a result have knowledge of more occupational choices (Pajares, & Urdan, 2006). Perceived low efficacy can have
a negative impact on their occupational selection. Self-efficacy is a powerful predictor of future success. Success in school requires adolescents to manage their self-regulatory systems. Strong self-regulatory systems build efficacy. The development of students’ self-efficacy is paramount to not only their success in school but to further lifelong trajectories.

**Distinctions Between Related Terms**

Confusion often occurs when discussing self-efficacy and other perceived similar social cognitive constructs. Self-concept, self-esteem, outcome expectations, and perceived control are similar constructs that have been mistakenly used interchangeably with the term efficacy. Distinctions will become apparent after taking a closer look at efficacy. This will give further explanation why efficacy is the preferred construct to measure and predict academic performance. Efficacy is one’s cognitive judgment on a personal capability. It is domain specific, context specific, and multidimensional; varying in levels, generality, and strength. As cited in Parjares and Urdan (2006), Zimmerman describes the dimensions of efficacy in terms of level, generalizability, and strength.

The level of self-efficacy refers to its dependence on the difficulty level of a particular task, such as math addition problems of increasing difficulty; generality of self-efficacy beliefs refers to the transferability of one’s efficacy judgments a crossed different tasks or activities, such as different academic subjects; strength of efficacy judgments pertains to the certainty with which one can perform a specific task (p.47).

Though efficacy is domain specific, it can vary within a subject depending on the level or type the activity. In art, one might experience high efficacy when drawing using a grid system while experiencing low efficacy when drawing representationally from direct
observation. Both are different drawing activities, ranging in difficulty within a single domain.

**Self-concept.** Self-concept has been used interchangeably when discussing efficacy. These concepts differ, however, as self-concept refers to the generalized global assessments of an individual, whereas efficacy pertains to one’s perceived capability in a task-specific domain. Self-concept is measured through general beliefs, such as self-worth, rather than task-specific performance.

**Self-esteem.** Similar to self-concept is the construct self-esteem. Self-esteem is the judgments of one’s self-worth. Self-esteem is loosely related to efficacy in the way a person might measure their self-worth. For example, one might believe that they are an intelligent person if they can perform well on a test. They use how they perform on a test to regulate their self-worth, qualifying their intelligence to unrelated values. One’s self-esteem and self-worth are distinctly different from one’s sense of capability and efficacy.

**Outcome Expectations.** Outcome expectations have been synonymously used with efficacy but differ conceptually. The general theory in outcome expectations is when a student performs a task, outcomes follow. Schunk and Pajares (2001) define outcome expectations as “the consequences expected through one's own actions” (p. 3). They provide an academic scenario to explain this theory: a student with a high level of efficacy in art believes he or she can learn art and improve his or hers skills. Despite holding a high level of efficacy for the arts, they perform poorly in the class. They attribute their poor performance to independent factors from their task and performance, such as, their belief that the teacher does not like them. Expectancy theory does not take into account one’s perceived capability at performing a task, but rather focuses on the
beliefs about one’s anticipated outcomes. The expectancy of performance is independent from efficacy, which is one’s perceived capability to perform a task at designated levels. Outcome expectations neglect to measure one’s perceived performance ability.

**Perceived Control.** Similar to the expectancy theory is the construct of perceived control which also differs from efficacy beliefs. Perceived control is formed from the locus of control theory (Pajares & Urdan, 2006; Rotter, 1966). Similar to Dweck’s mindsets theory, the locus of control theory suggests that people perceive control in events in their life. There are two types of locus of control: internal and external. One who embodies an internal locus of control attributes success and failures to internal factors in which they control. These students are self-directed learners. In contrast, the successes and failures of individuals with an external locus of control blame outside factors. The locus of control theory anticipates one’s perceived outcomes either on internal or external factors.

Research indicates that efficacy beliefs are a stronger indicator of academic success than other, similar, constructs because they are task and context-specific (Pajares & Urban, 2006). It is important to note that efficacy alone is not the only indicator of academic success. If knowledge and skills are insufficient, efficacy by itself will not produce favorable competencies. In the realm of outcome expectations, if a task seems too difficult, the likelihood of student engagement can decline. If a student does not see the value of a domain, this will compromise their level of engagement.
Efficacy holds a predominant place in the arts, affecting artistic achievement. Pajares and Urdan (2006) explains how efficacy beliefs foster learning, “Compared with learners who doubt their capabilities, those who feel self-efficacious about learning or preforming a task competently are apt to participate more readily, work harder, persist longer when they encounter difficulties, and achieve at higher rates” (p. 73). In picturing the efficacious art student, the components Pajares and Urdan describe appear accurate. Through my experience, the motivation to participate in an artistic endeavor is dependent on a student’s perceived sense of success. Students will be more willing to engage if they can anticipate a positive outcome. Students who are willing to engage generally gain more experience and practice at learning and developing skills. Success is not determined by the level of efficacy a student expresses, however, it will provide stamina to endure through academic challenges. It is important to note that efficacious students do experience failures. Their endurance to persevere through failures, however, is stronger than their peers who doubt their capabilities. Efficacy has a positive correlation to motivation, experience, and persistence.

In order to identify how to foster efficacy it is necessary to attempt to describe its appearance in the secondary art room. There is limited research interpreting efficacy’s role and appearance in the high school art room setting. I hypothesize the limited research is due to extending contextual factors affecting efficacy beliefs. The complexity
of efficacy extends far beyond academic competencies into cultural influences, such as socioeconomic status, peer interactions, and family environments. In addition, efficacy beliefs differ from one student to the next and vary dependent on the subject and activity. Thus, it would be impossible to suggest that efficacy appearance in art is simple as it operates independently within the art room.

**Reviewing the Demised**

Efficacy is loosely revealed in Graham’s (2003) action research. Graham charted the progression of adolescent artistic development among six students with the intent of dismantling the demise. Graham was particularly interested in how curriculum, instruction, classroom atmosphere, and teaching representational skills influenced art production (Graham, 2003). Over the course of a year, researchers interviewed participants to identify students’ attitudes and evaluations of their work. The participants were ninth grade art students with diverse backgrounds and interests. Though its small sample size, Graham’s research is a valuable resource for its findings in establishing a sense of self-efficacy among adolescent artists.

**Findings**

In his findings, Graham acknowledges the complexity in teaching artistic conventions while sustaining adolescent interest. It is necessary to have balance between conventions and personal interests, “When this connection was made successfully the results were personal satisfaction and a sense of artistic growth” (p. 176). This balance is invaluable for fostering efficacy. If the focus of the curriculum is heavily measured by artistic conventions, student motivation can decrease if they hold a perception of failed realism in their work. With the addition of personal inquiry while supporting graphic
representation, Graham found participants having sustained effort, a sense of pride, and feelings of accomplishment. These attitudes apparent in Graham’s research are characteristics of efficacy. Efficacy is established when the curriculum is designed for students to instill personal expression in combination with building skills to represent the third dimension.

**Developing Efficacious Artists**

A simple formula does not exist to promote the ingredients of an efficacious artist. Graham’s research supports that a pre-package curriculum would be ineffective without considering the diverse and personal needs of each student. It is important to know that the complexes in efficacy beliefs range across the spectrum, and are dependent on the individual. Although curriculum design has proven to promote artistic growth as observed in Graham’s findings, there are many more contributors to efficacy. Bandura describes four main sources of efficacy. They are mastery of experiences, vicarious experiences, forms of persuasion, and physiological reactions (in Parjares, & Urdan, 2006). Students’ efficacy is measure by their perceived performance. Generally, more successes when performing an activity will increase the chances of mastery, thus enhancing a student’s sense of self-efficacy. Adversely, more failures will diminish efficacy. In the art room, vicarious experiences, such as watching a peer successfully throw a pot on the wheel, can also contribute to other students’ sense of self-efficacy. When students view others experiencing success, the task appears more attainable. Unlike mastery of experiences, where students have to engage in a behavior to form their efficacy beliefs, engagement may not always be necessary to enhance or lower efficacy.

Others can enhance student’s efficacy by providing various forms of persuasion.
Forms of persuasion typically derive from someone who is viewed as influential, such as, a teacher, coach or a peer. Encouragement from others can sway efficacy beliefs, and discouragement can deter beliefs. The final source of efficacy is physiological reactions. Physiological reactions may occur when a student is anxious before a test or speaking in front of a group. Feelings of fear and anxiety impact efficacy beliefs. These four sources of efficacy and their application in the secondary art room will be outlined in depth later in this thesis. In order to identify methods for improving efficacy beliefs it is first necessary to understand how students develop low efficacy.

**Stages of Artistic Development**

The demised adolescent art student is a byproduct of decreased efficacy. It is appropriate to review the stages of artist development to have a greater understanding of when and why the self-conscious artist emerges. Commonalities in artistic development can be traced through the progression of children’s drawings through adolescence (Lowenfeld & Brittain, 1987). Like stages in cognitive and physical growth, artistic developmental stages vary from person to person. Though every child may not fall within the described trajectory, the stages of artistic development provide us with general guidelines. Each stage offers us insight to our students’ capabilities, interests, and limitations. While there are various stage theories about child art development, in this paper I will rely on the work of Lowenfeld and Brittain (1987), who label the stages as, Scribbling, Preschematic, Schematic, Dawning Realism, and Pseudo-naturalistic.

**Scribbling**

Art plays a vital role in early childhood development. Despite the common perception that art begins in the visual form by creating marks on paper, it begins much
earlier when a child reacts to their environment through their senses (Lowenfeld & Brittain, 1987). Lowenfeld and Brittain make a point that adults should not underestimate children’s scribbles as a senseless activity because of the word’s negative connotation. In fact, this is far from the truth. Children’s scribbles are an intentional form of expression and a kinesthetic reaction to their surroundings. It is not necessarily the scribble that is important; it is the experience of sharing. Children are eager to share their work with adults. This is a behavior that disappears in later stages. Adults’ reactions to children’s drawing at this stage can affect their attitudes later in their development.

The Scribbling stage begins around eighteen months and lasts until four years. Lowenfeld and Brittain describe the appearance of Scribbling as, “random marks on paper (that) gradually evolve into drawings that have content recognizable to adults” (p.188). Scribbling begins as a disorderly mark. After six months, from when the child began scribbling the disorderly appearance evolves into controlled marks. Scribbling is a pleasurable experience for the child. It is not an attempt to convey the environment naturally. It would not be appropriate to ask a child to copy a drawing from an adult during this stage. Lowenfeld and Brittan compare this to asking a babbling child to recite the Gettysburg’s Address; it is an the inconceivable task. The final stage in Scribbling is when children begin to name their drawings. This marks a transition in their development from merely a kinesthetic activity to viewing drawings as symbols. Although the appearance of the scribbles still resembles expressive marks on paper, naming scribbles is significant for its cognitive shift in artistic development.
Preschematic

Naturally evolving from the Scribbling stage is the Preschematic stage. This stage occurs around four to seven years of age. Similar to the Scribbling stage, children are not self-conscious about their drawings and are eager to share them with adults. The significance of this stage marks children’s first attempt at representational drawing. Lowenfeld and Brittain describe the developmental shift in children’s drawings, “The marks and scribbles have lost more and more of their relationship to bodily movement, and these marks are controlled and related to their environment” (p220). Most importantly the drawings from children in this stage provide adults with concrete archives of their intellectual growth and thought processes. Cognitive development can be evident in children’s drawings, “A series of drawings by a five year old child would normally include some representational attempts. The more differentiated these attempts are, the more highly the intellectual processes have been developed” (Lowenfeld & Brittain, 1997, p. 236). Drawings provide us with tangible records of children’s cognitive development along with methods for enhancing communication between the child and the adult.

Characteristics in Preschematic drawings are identified in subject matter, color, and composition. Humans are a popular subject in children’s drawing at this age. Lowenfeld and Brittain describe the significance of children drawing people, attributing the importance of adults in children’s lives. People are depicted similarly and universally among children at this age. Lowenfeld and Brittain identify these drawings as, head-feet representations. Drawings of people typically are illustrated with a round circle for a head, and two lines extending from the head representing the legs. As children age, their
head-feet representations advance into figures with bodies with added details. There is a general agreement that the goal for children is not to draw a person realistically, but rather representationally. It is a symbol that is significant; therefore, these drawings should not be criticized as immature in nature. It would be unreasonable to teach a child at this age to draw a person anatomically and proportionality correct. Humans may be illustrated in Preschematic artwork in an array of colors. Color section is spontaneous and abstract in nature. There is little psychological significance in the color usage; it is more experimental and random in nature. The compositional space in the drawing does not follow the conventions of Western linear perspective; a perspective in which adults have become accustomed to. To an adult, objects in a drawing may be perceived as randomly placed. There is little interest between the spatial relationships of objects in a room, but rather how they perceive them. This may be explained by the egocentric thought processes of a child. Children eventually begin to develop their own set of visual schema, or patterns of representing things and ideas, which is the importance of this stage in development.

**Schematic**

The development of symbolic pictorial schema is a result of experimentation from the preceding Preschematic stage. This occurs in children from ages seven and lasts until approximately nine years of age. In schematic drawing, a child will repeat an image over and over again with no intentional change. This can be experienced when children develop a schema for drawing people, by drawing a family portrait, showing no deviations between family members. Pure schema for a child is a generic representation of an object, not a realistic ideal. In depicting a portrait, children may use simple
geometric shapes to represent facial features, such as a triangle for a nose or circles for eyes. The configuration of these forms read together as a face, but read separately, appears as simple geometrical forms. Children develop individualized schemata for objects in their environment, such as trees, humans, and animals. Their individualized drawings stem from their interests, emotional influence, kinesthetic experiences, and sensory interactions. Just as children differ, schema of like subjects will vary drastically from child to child. Children do have the ability to change their schema, a fact that is particularly important, and validates a teacher’s instructional influence. The Schematic stage in artist development heralds “the child’s growing intellect” and serves as a graphic representation of the child’s “increased understanding of the surrounding world” (Lowenfeld & Brittain, 1987, p. 285). Unlike the Preschematic stage, where the composition appears filled with random and scattered images, children in the Schematic stage begin to notice spatial relationships within an environment. A compositional characteristic representative of the Schematic stage is as concept called base line. Just as the head-feet representations is indicative of the Preschematic stage, so is the base line arrangements in the schematic. It appears logical by presenting subjects on the base of the paper as it represents the ground to children. Deviations from the Schematic stage occur when children become dissatisfied with their schemata seeking an alternate form of representation.

**Dawning Realism**

The emergence of self-concept, personal experiences, exploration of the environment, and peer interactions cause a shift in children’s drawings. A generic schema no longer satisfies children’s visual inquiry and ability to differentiate between
forms. Dawning realism occurs in children ages nine through eleven. Children at this age are becoming increasingly aware of their surroundings and relations to their peers. This stage has been coined the Gang age for the added significance of social interaction. Along with cognitive development, social growth is equally important for children at this age; building and establishing social groups and determining their place in society is of great importance. Their developmental and social growth directly reflects in their art making.

The emergence of a realistic style separates this stage with that of its predecessors. Art work is portrayed through children’s own experiences. Drawings appear realistic, although it is common for children to omit naturalistic details, such as folds in a shirt or how light hits an object. These naturalistic details seem unimportant or irrelevant for conveying an idea or subject. The term realism has been used interchangeably with naturalism; however, they are two conceptually distinct ideas. “Naturalism refers directly to nature and realism refers to what is real” (Lowenfeld & Brittain, 1987, p. 308). What is real is subjective to each individual, while naturalism is universal for many audiences. There is a greater understanding of three-dimensional space at this age. The base line synonymous with the Schematics stage has evolved into multiple base lines, an expansion of space representative of the exploratory nature and increasing independence of a child at this age. Depictions of humans have unique characteristics; parts removed from the form would still appear recognizable unlike the geometric shapes that make up the human form from the Schematics stage. Figures have distinguishing characteristics making them appear real, although there is often a stiffness in them that gives them an unnaturalistic appearance. Lowenfeld and Brittain found
similarities in untrained adult artists and the work of children from the drawing Realism stage.

Children’s art making is affected by an increased awareness of their environment, personal experiences, and social understanding. This includes increasing knowledge of visual exemplars, usually in the form of representational art created by adults. Lowenfeld and Brittain describe the dissatisfaction if there is a gap in expectations, “Children can sometimes be critical of the drawings from others and even of their own drawings if these do not live up to their own interpretations of what is real” (p. 324). Children at this age may become reluctant to share their drawings with adults, which is a distinguishing difference between the Schematic stage and Dawning realism. As individuality develops during the Realism stage so does self-criticalness. This self-consciousness continues to the next stage of development.

**Pseudo-naturalistic**

The Pseudo-naturalistic stage in artistic development occurs in early adolescence, ages twelve to fourteen. Cognitive, affective, and social development during adolescence is marked by increased independence, abstract thought, and critical awareness. The physical and mental changes of adolescence also cause a shift in young people’s artistic expression. Concerns about appearance and judgments from others fit within the realm of heightened critical awareness. Adolescent’s concerns about complying with social norms can cause conflicts as young people simultaneously seek their individuality. The spontaneity apparent in their art during earlier stages of development is lost, instigated by the gain of self-awareness. Artistic expression was previously generated through stored memory about a subject, now it is a move towards
what is observed or seen. As a result, naturalistic features neglected in the previous stage are now suggested, such as folds in fabric and rendering of light and shadow. The shift toward naturalism is depicted in students’ subjects, pictorial space, and color choices. The human figure is a popular subject, especially among females during this time, perhaps due to the changes the adolescent body is undergoing, which raises curiosity and intrigue. There is a heightened awareness for color, and recognition of the variations within hues depending on how light interacts with a surface. Along with increased awareness of color, the third dimension is emphasized through the deepening of space. In general, an increase of self-awareness extends into a critical awareness of one’s environment. This creates shifts towards naturalism within their work while adding a level of self-consciousness.

As with the other stages of development, this is a critical period, when attitudes towards art-making will influence future artistic endeavors. Similar to the drawing Realism stage, adolescents may be reluctant to show their work to adults and peers. There is now an emphasis on the end result of a work of art, rather than an appreciation or enjoyment of the process, as in other stages. The end product must look a certain way in order for the adolescent to be satisfied with their work. Positive reinforcement and praise from adults show little influence on the students’ level of satisfaction with the end product (Brittian, 1968). I can attest to this personally, recalling numerous occasions in providing doubting students positive affirmation. This poses a challenge for art teachers: how can we as instructors provide Bandura’s source of efficacy, persuasion from others, while effectively increasing students’ efficacy? Discussion will follow in later sections that will address forms of persuasion. Ultimately, mastery of experiences is the most
powerful source of efficacy; students must perceive themselves succeeding before others acknowledge it. Another challenge to consider is the nature of success; it is subjective from student to student. This may be that last stage in artistic development for the majority of students and adults alike, if they do not sustain interest or desire to improve.

**Artistic Development in the Secondary Art Room**

Lowenfeld and Brittain (1987) identify the stage of development between ages fourteen and seventeen, as the period of decision making. A small population of students chooses the arts. In the 1980s, when the most recent edition of Lowenfeld’s and Brittain’s research was published, only one out of seven students will enroll in a high school art class. Referencing back to the demised adolescent, the reasons for lack of engagement could be accounted for by the assumption that art is unimportant, that art is a childhood activity, or that art is reserved exclusively for the talented. Motivation and desire to elect an art course appears to be a determining factor. Lowenfeld and Brittain recognize this shift and the role of motivation to continue pursuing the arts,

Eight year olds will draw like eight year olds even if they have not had much opportunity to use art material. Sixteen year olds, on the other hand, will draw in the same way that they have been drawing for the past three or four years, unless they have had the opportunity and desire to improve their artistic skill (p. 434). For the most part, adults who, during their education, chose to not continue participation in the arts are likely to remain at the Dawn Realism, or even Schematic, stage. I have experienced drawing phenomena reflective of earlier stages in the high school art room. In a portrait drawing unit, I have observed students using schema established for drawing an eye, as it appears identical in a self-portrait and in a drawing of someone else. Another example is in a still life drawing, where a student places the objects in an arrangement
similar to the *base line* instead of how they naturally appear.

Artistic development in the secondary art room will look different depending on the student. As the stages of development proceed from childhood to late adolescence, the formation of individuality and greater independence deepens among students. Art is now viewed as a subject that is purposefully learned, not a spontaneous response. For those reasons it is difficult to characterize this stage of development because of the diverse and limited populace. Art programs at this level should support the individual’s interest (Graham, 2006). The purpose behind art making should be relevant and visible. There should be allowance for individuality within the curriculum. Regimented curriculum standards that fail to address the individual make it difficult for students to see the real-world application of art.

**Critical Periods**

Monumental points in artistic development separate the perceived artist from and “non-artist” beginning in preadolescence. These young adolescents have acquired a stigma about the arts as the result of one negative experience or another. The influence of peers begins during the Dawning Realism stage, as young people judge each other’s art work. Added self-awareness to young people’s environment contributes to a level of criticalness in their work. At some point during preadolescents, students have determined whether or not they believe they are “good” at art. This identification and foreclosure raises personal concern, because it limits opportunities for students who would otherwise benefit from the arts. What does it mean to be “good” at art? Is there such a criteria? The following section will explore concepts of exemplarily art and its relationship to perceived competence.
Perceptions of the Artistically Inclined

As in any discipline, a teacher faces an array of students’ abilities. In art, some students appear naturally and technically more artistically developed than others. The teacher and their peers notice these students. This does not surprise me, because it is true in other domains, for example, there are more academically inclined individuals that one could observe in an algebra or composition class. However, what separates art from other disciplines is its subjectivity, and society’s belief that people are “talented” in the arts or they are not, there is no in-between. As previously stated, I believe that everyone can improve and develop artistically at any level. I have also witnessed that some students are more advanced than others. In learning in a domain, the expenditure of effort it takes depends on the individuals’, motivation, knowledge, experience, preferred learning styles, and cultural influences. I argue art is different, with the respect that our society perpetuates the notion that one is either born with art talent or not. Edwards (1986) confirms that we have separated art from other domains, isolated it as an elusive talent. “We have become accustomed to thinking of artist ability as basically unteachable and teaching methods have remained unexamined” (p. 7). Edwards compares the absurdity of this mindset in applying this belief to other disciplines,

What if teachers believed the best way to go about the teaching of reading is simply to supply lots of reading materials for children to handle and manipulate and then wait to see what happens? Such teacher would, of course, never tamper with a child’s spontaneous attempts to read for fear of spoiling “creativity in reading”. If a child asks, “how do you read this?” The teacher will respond, “Just be free!” “Do what comes into your head”. “Use your imagination and just enjoy it!” “Reading should be fun!” Then the teacher would watch to see which child showed “talent” for reading – The idea being that it’s no use trying to teach the
skill of reading because if a child isn’t talented instruction wouldn’t help (p. 6).

Edwards confirms that educators would never expect a child to read without explicit instruction. Unfortunately in many districts, general education/classroom teachers are expected to teach art or art specialists are spread too thin, being split between buildings. For example, in my district, we have two elementary art teachers for three schools. Our middle school teacher splits instruction with the middle school and high school. Because of the scarcity of art teaching resources, populations of middle school students do not have the opportunity to take art. There seems to be confusion in the teaching of art for numerous reasons, perhaps the fear of tampering with a child’s creativity, or the belief that art is not a teachable domain where only the talented can succeed. While there is no doubt that there are artistically inclined individuals, the emergency of technically inclined individuals is found in other subjects which are approached with more structure and emphasis on developing the subject expertise regardless of innate ability. So what are the characteristics of the artistically inclined, and is there an association with intelligence?

**Talented vs. Gifted**

There is not a definite agreement on terms used to describe the artistically inclined. Terms such as talented or gifted have been used interchangeably to describe exceptional performances in the arts. According to Lansing (1963) gifted individuals are similar to a Renaissance man, who performs well in diverse domains. Talented individuals, on the other hand, perform exceptionally well in a specialized domain. This specialized talent is attributed to what seems to be innate skills, unrelated to their level of intelligence. Lansing recognizes, “talented” people usually score high on intelligence tests, but high intelligence is not necessarily a prerequisite for an exceptional artist.
Salome (1974) uses both talented and gifted when discussing the artistically inclined and differentiates between the talented and the genius. “The talented person is described as gifted, clever, accomplished, while the genius is said to have extraordinary capacity for imaginative creation, original thought, invention, or discovery” (p. 16). Obviously, there are conflicting views surrounding the intellectual ability of the gifted and talented. Regardless of the terms used to describe a student’s artistic performance, what is the value, if any, in identifying these traits? In recognizing the “gifted,” are we perpetuating the notion that only artists can benefit from an education in the arts? If so, then who is an art program for?

The association of giftedness or talent has raised some concerns. What are the benefits and consequences in identifying these students as it relates to art education? Are these traits worthwhile to explore, in order to provide a student with heightened efficacy in the arts? Lansing (1963) argues that the intellectually gifted child can have tremendous potential in art. The arts can support the intellectually gifted who might have deficits in expression, perception in which the arts could provide support. Salome (1974) supports the importance of identifying the artistically gifted in early elementary school, while also stressing the difficulty with the identification process. Early identification offers the opportunity for supportive, individualized instruction, which provides motivation for the child, and helps them to remain interested in future artistic endeavors (Salome, 1974). Mendelowitz (1953) cautions the recognition of the exceptional artist. The development for art programs established exclusively around the “exceptional” artist in the beginning of junior school perpetuates a trend that art is only for the gifted and barricades the “non-exceptional” student. Mendelowitz (1953) says that this is
concerning because most students do not recognize their interests, until late adolescents. “The restrictive concern with special talents indicates a basic misunderstanding of the role of art activities in a child’s developments” (Mendelowitz, 1953, p.18). Programs that cater to the exceptional artist exclude opportunities for those who have low efficacy in the arts. Even programs created for all levels of students, they exclude low efficacious students inadvertently because of the perceived association of art and talent. There are clearly benefits and concerns for identifying the gifted within our subject. What may be useful is not to establish a curriculum solely for the gifted, but to explore traits of the visually inclined. Can these traits be developed, so low efficacious students can seek mastery and fulfillment from the arts?

It is necessary to see what “skills” are needed to perform well in the arts. So we as teachers can teach these skills and students can develop artistic efficacy. Academic and behavioral gains from participating in the arts provide proof that arts are beneficial in education (Catterall and Chapleau’s, 1999). To increase participation, our task is to first dismantle the perception that in order to engage in the arts you have to be “good”, and second engage students so they can perceive themselves as being competent. The next few sections will explore what performance looks like in the secondary art setting. The artistically inclined have developed parts of the brain that enable them to translate the world. Cognitive development among the gifted artist appears to be different from the average.

Art and Cognition

The development of cognitive systems used to interpret the visual world is dependent on one’s experiences. Jenson (2001) cites an experimental study investigating
the development of visual perception, in which cats were raised in an environment that had no vertical lines. It was found that “when deprived of a world of vertical lines, cats will grow up unable to see them” (Jenson, 2001, p. 52). There are critical developmental periods of our brain, when visual sensory is neglected it can greatly impact our ability to see our environment accurately. In comparing the gifted artist to the average, Milgram and Dunn (2009) found developmental differences. They describe multi-modality strengths, visual, tactile, and auditory, of the “gifted” artist,

Apparently, artistically gifted adolescents reach sensory maturity earlier than most young people, for among the general population, young usually enter school with solely kinesthetic and/ or tactual strengths. Strong visual memory develops among some by third or fourth grade at the earliest, although perhaps 10 to 12 percent of kindergartners have it. However, one-third of many high school boys remain tactual and kinesthetic only, and few adults reveal three perceptual strengths. Most have one, gifted student have two or more (Milgram & Dunn, 2009, p. 132).

Engaging in the arts is a whole brain experience. One who is considered gifted possesses the ability to engage in multiple experiences simultaneously. Jenson (2001) describes the cognitive processes of the brain in conjunction with art. The parts of the brain responsible for cognition when engaging in the visual arts are the occipital, frontal, parietal lobes, cerebellum, and midbrain. An individual who has a strong understanding for spatial organization and perception has a mature occipital lobe. A visually oriented individual recognizes subtleties within the environment, discriminates contrasting subjects and colors, and has a strong visual memory (Lark-Horovitz, Lewis and Luca, 1967) as cited in Salome (1974). The following are the other parts of the brain and their designated functions, the cerebellum is responsible for kinesthetic activity, frontal lobe
for processing, midbrain for emotional reactions, and parietal for sensory organization. Jenson (2001) states that learning how to see develops through experience. We suspect that experiences are what separate average students from the “gifted.” If we want our students to participate in the arts we must provide them with the opportunities to stimulate their senses. A student’s efficacy will not improve if they have limited experience.

**Characteristics Unique to the Visual Arts**

A major part of developing efficacy in the visual arts is developing our ability to see. Along with seeing, there are other distinguishing characteristics among the artistically “gifted.” Lowenfeld identifies five characteristics among what he terms the artistically “gifted.” These characteristics are,

1. Fluency of the imagination and expression, the freedom in which a child adapts his ability to the diverse situation.
2. A highly developed sensibility for spatial distribution and organization, often emphasizing rhythm and movement.
3. An intuitive quality of imagination. The ability to bring into existence constellations or events that have not existed before.
4. Directness of expression which manifests itself when an experience is in tune with the child’s desire to express it visually.
5. A high degree of self-identification with subject matter and medium—intense feeling for the medium. (as cited in Salome, 1974, p. 18)

Conant and Randall (1959) have identified gifted children having a greater level of persistence among their peers. As discussed in earlier sections, students with heightened efficacy persist longer compared to their counterparts. In order for these students to feel motivated to persist, they must have a level of confidence they will succeed. Authorities have provided us with characteristics of gifted art students. Are these characteristics
necessary for students to develop a sense of efficacy for the arts? How do students view success in an art class? Does their perception differ from the instructor’s?

**Differing Perceptions of Exemplary Art**

Unsworth (2001) has cautioned educators against promoting the idea of “good” art, as there is no objective standard by which to measure such a judgment. When art instructors attempt to identify good or bad art, adolescents can be influenced by these standards (Lowenfeld & Brittain, 1987). In this scenario, educators inadvertently think students are gaining aesthetics awareness, when in actuality students are making these judgments based on the grading criteria. With regard to aesthetics, Lowenfeld and Brittain (1987) acknowledge that each individual possesses different tastes. Aesthetics in general are continually changing in to our society and culture. Using the automobile industry as an example, the transformation of car styles is profound and continually evolving.

There is a belief that “good” art education is equated with the production of good art. Pistolesi (2001) contemplates the statement. The average person’s perception of “good art” is based on standards that no longer apply in our post-modern society (Pistolesi, 2001). In the past, there was a very narrow but clear categorization of art. Now in post-modern times, vast arrays of artists have disrupted our notion of who can create art and with what materials.

Art production is based on the individual’s intention, style, and perception. Young (1985) confirms that our focus should be on our students. Rarely, though, do art educators consider their students’ input in designing the curriculum (Young, 1985). Evaluating sixth graders’ attitudes towards art, Young found that “Some children simply
don’t respond favorably to certain materials, and others respond favorably; all student’s perceptions and abilities should be noted and acknowledged by teachers for maximum educational effectiveness” (p. 49). Art production should not be centered on the materials, but instead should be focused on the content. Young (1985) cautions that without meaningful content, even the most facile use of materials and techniques can come across as superficial.

In summarizing efficacy in the secondary art room, artistic and cognitive development, perceptions of talent, and pedagogical practices, are all interrelated. A large part of creating art is developing our mechanism of sight through our visual experiences. Learning conventions in art can hold value as long as they are combined with meaningful production and individual inquiry. Artistic development described by Lowenfeld and Brittain have identified critical stages that form our students’ perception regarding art. Participation in the arts can be effected in self-identifying perceived poor artistic traits. There is a connection between efficacy and actual performance. If students perceive themselves performing poorly in art, generally speaking they will be less inclined to participate. Likewise, if students perceive themselves as successful, their motivation to participate in future artistic activities increases (Pajares, and Urdan, 2006). Increases in performance and perception are vast, because perception of performance is dependent on the individual’s evaluation of their accomplishments. Nurturing and developing students’ feelings of self-efficacy is a complicated task, but the effects can be powerful when cultivated in the proper academic setting.
DEVELOPING EFFICACY THROUGH FOUR SOURCES

Pervious sections have attempted investigate efficacy through the production of exemplary art, by examining traits among the “gifted.” It was concluded that succeeding in the visual arts will appear different from individual to individual depending on the difficulty of the task, competency level, assessments of performance, personal intent, and motivation. Motivation needs to be a consideration in the secondary art room. Efficacy will not improve without sufficient motivation.

Motivation

In order to build efficacy in the arts, one must have an optimal level of motivation. Motivation fits within all four sources of efficacy outlined Bandura’s theoretical framework. Efficacy is directly united to motivation theory. To instill a sense of motivation we must first crafts lessons that are relevant and meaningful to our students. Gardner (1991) Daggett (2005) advocate schools’ success as related to learning rather than rudimentary tasks (Gnezda, 2009). Students need to be able to recognize the importance in each lesson. Gnezda, (2009) notes, “relevant, meaningful art assignments can encourage production of higher quality work” (p. 49). Relevant assignments can instigate self-directed initiation, intensity, and persistence of behavior, which are all characteristics related to motivation theory (Jones, 1997).

How does one design an art program that fosters efficacy beliefs and fuels motivation? Concerns have been expressed as to whether the pedagogical focus is heavily placed on developing perceptual knowledge. Balance between skill building and
personal expression is essential for promoting motivation. I am not suggesting structuring secondary art programs around building perceptual skills because there needs to be room for personal expression. I will share how training in perceptual drawing is valuable at the secondary level. It provides the foundation for individualization in student work.

**Individuality in Representational Drawing**

There are many views in the value of teaching perceptual skills in art education. An art program is based on perception alone raises some concern around the possibility of limiting opportunities for personal and creative expression. On the other hand, one may argue that learning how to draw through perception will inheritably provide the skills needed in future forms of expression. Edwards (1999) describes her pedagogy in teaching the basic skills of seeing, referencing *The new drawing on the right side of the brain*,

The purpose of this book is *not* to teach you to express yourself, but instead to provide you with the skills that will release you from your stereotypic expression. This release in turn will open the way for you to express your individuality- your essential uniqueness- *in your own way*, using your own particular drawing style (p. 21).

Edwards believes that learning to draw forms how they naturally appear will provide the basic skills to individualize a student’s subject. At first this theory sounds like a paradox. How can one express themselves in a unique way if they learn to draw their subject how it naturally appears? How can translating the real world accuracy individualize an artist? Edwards (1987) alludes to our own signature to combat individual expression within a universal alphabet. We all read, “a” as the letter “a,” however, if we all were to write the letter a, the depiction would be vastly different across subjects. Edwards (1987) suggests
we draw every day, instilling our own form of personal expression within a universal language. If we did not have an alphabet or canon to our language, literacy would be lost. Therefore teaching drawing skills is necessary for individual expression.

In addition to signatures serving as a form of personal expression, Edwards adds artistic development as it relates to individuality. If one does not learn how to break through generic imagery, developed in Lowenfeld and Brittain’s (1987) Schematics stage, it will become very difficult to achieve uniqueness across subjects. This can be observed in Edwards (1999) pre-instruction drawing exercises. Students are asked to draw a series of three drawings: a self-portrait using a mirror, their hand, and a drawing of a person from memory. Edwards explains that we resort to our symbol system developed in childhood to create the drawing from memory. The intent in this exercise is to expose the visual schema in the drawing from memory, and to see if it is apparent in drawings from observation. If there are similarities among the self-portrait, and person from memory, then student’s visual memory is conflicting with their visual acuity, what they actually see. I have experienced this phenomenon with beginning artists. In some cases students have developed a distinct and universal style for portraying a subject, for example, an eye, which is identifiable because the eye looks similar across portraits of different subjects.

Edwards proves that uniqueness and personal expression can be cultivated in teaching students how to translate the natural world through building perceptual skills. She teaches us that subtle differences among subjects can add a large degree of naturalism in our work. Edwards teaches her students a fundamental skill in art: learning how to see. This skill is invaluable for building artistic confidence and individuality.
Reliability

Edwards combats the assumption related to art being an inherited trait through the use of brain-based research. She provides tangible evidence to support her philosophy that art is a teachable and learnable skill providing the R-mode and L-mode theory. To simplify her theory, the R-mode or right-hemisphere of the brain is responsible for non-verbal, visual/spatial acuity, while the L-mode, left-hemisphere, is logical and linguistic (Edwards, 1999). Supporting this theory, Edwards references numerous studies (Gazzaniga 1972, Levy and Trevarthen and Sperry, 1972) conducted on “split-brain” patients.

Researchers have found that the brain isn’t as divided as Edwards claims. Edwards’ theory has been criticized for its dated assumption that in order to be a proficient artist one needs to learn how to draw using the right hemisphere of the brain. Research now proves the brain isn’t strictly divided into left-hemisphere and right-hemisphere when performing in the visual arts, but rather, it involves a unilateral set of skills (Jenson, 2001). Clare (1983) references numerous studies indicating the left side of the brain’s involvement in drawing accurately, suggesting that the brain activity while drawing is bilateral. Extensive research has been carried out on brain damaged patients by Galin and Ornstein using electroencephalograms (EEGs) (1972). Clare summarizes their findings, “In fact, in that same study there was no indication that drawing tasks involve more right brain processing than a writing task. It was concluded that drawing required the integrated activity of both hemispheres” (Clare, 1983, p.127). Therefore, research reinforces that both sides of the brain are actively involved in drawing processes.

Although Edwards’ right-hemisphere inclusion theory has been contested, I
believe Edwards’ work has demonstrated indisputable transformations among her students work. It does appear that a shift in cognition is necessary for improving likeness in drawing. Jones (1997) recognizes Edwards’ work as noteworthy. Edwards’ carefully sequenced drawing exercises, though not especially unique, separate her from other drawing programs (Jones, 1997). “It is Edwards’ careful attention to building student self-confidence that makes the difference” (Jones, 1997, p. 33). It was through Edwards’ first-hand experience in the classroom where she learned how to develop student confidence (Jones, 1997), though not from her theological brain-based research.


**Mastery of Experiences**

Jones (1997) refers to Bandura (1986) sources of efficacy; mastery of experiences as the most powerful of the four sources to increase efficacy. “Students’ own performances offer the most reliable guides for gauging self-efficacy” (Pajares & Urdan, 2006, p. 73). The purpose of this section is to identify methods for increasing one’s efficacy through mastery of experiences. I will offer drawing strategies from Edwards that are useful for improving student’s efficacy based on social cognitive theories. These strategies are versatile across all levels of students and appropriate to implement in the secondary art room.
Perceived Task Difficulty

Edwards carefully designs lessons considering the balance of difficulty level. According to Jones (1997) the task difficulty must be balanced; neither too challenging nor too easy to produce an optimal outcome. If the task is perceived as too difficult, the consequence could be avoidance and anxiety, on the other hand, a task perceived as too easy will appear boring and pointless (Jones, 1997). Edwards (1989) purposefully selects portrait drawing because of the perceived difficulty of the task. She bases this rational from her teaching experiences relying on student’s perceptions with the subject. At first the difficulty of drawing a portrait appears to be elevated. When her students see that they can in fact draw portraits, they are rewarded with an increased level of confidence. Her theory maintains a universal truth: higher risk results in higher rewards. The difficulty of drawing a portrait is optimally difficult, neither too easy nor too challenging. Mastery of skills can only be fostered if motivation is evident and the task difficulty is balanced.

Bandura (1991) indicates when given the opportunity to monitor progress, self-evaluation of success will increase efficacy and motivation (as cited in Jones, 1997). The realization that Edwards’ students can draw portraits is only apparent through pre-instruction and post-instruction drawing. Pre-instruction and post-instruction drawings provide evidence to support growth and strengthen confidence.

Pre-instruction and Post-instruction Drawing Exercises

Edwards’ pre-instruction and post-instruction drawing exercises demonstrate the effectiveness in building student efficacy. In order for students to personally experience themselves succeeding through mastery of experiences, Edwards (1999) implements pre-instruction drawing exercises. “The drawings have proven to be invaluable in aiding
students to see and recognize their own progress” (Edwards, 1999, p. 14). Edwards (1999) has her students create a series of three drawings before she provides instruction to her students, a self-portrait, a person drawn from memory, and their hand. Minimal instruction is given for the drawings, to assess students’ current skillset. Recommendations are provided with the materials and the approximate amount of time needed for each drawing exercise. She suggests at least an hour of uninterrupted time for all three drawings. All the drawings are to be completed in one session to gain an accurate date of ability level, which eliminates other influences such as stress and attitude that may vary on a daily. After the drawings are completed, she encourages her students to write comments pertaining to areas of success and areas of struggle. Though reflections are not mandatory, they provide a record of self-evaluation. Self-evaluations in the form of reflections support Bandura’s (1991) motivation theory, which promotes efficacy. The drawings are then stored away until the course is fully completed. Her workshops are typically five days long with eight hours of instruction each day. At the end of the course, Edwards has her students retrieve their pre-instruction drawings. Edwards (1999) reflects, “Often my students are amazed, even incredulous, that they could actually have done the pre-instruction drawings they now find in front of them” (p. 224). She observes remarkable transitions in her students drawings often appearing as though another artist created the ‘before’ drawings. The ‘after’ drawings reflect great accuracy only apparent from actual perception, which she attributes to a shift in cognition. The ‘before and after’ drawings provide concrete evidence of the student’s artistic growth. One might wonder how Edwards gets her students to this level within such a short time frame. The following are practices from Edwards’ instruction that
provide her students with a sense of mastery within a short time frame.

**Scaffolding**

In order for students to experience mastery of skills the instructor must articulate the skills needed in the production of art forms. As art teachers, these skills have become accustom, almost intuitive, causing difficulties to fully and properly explain to our students. I recall as a beginning art teacher, telling my students *to just draw what they see*; as if drawing were as simple as observing and then sketching. I was frustrated in our observational drawing assignments when my students were not translating their observations accurately. I am now positive my students were equally as frustrated. My recommendation, *draw what you see*, was clearly an inadequate explanation for the assignment. I needed to breakdown the drawing instruction further, in more specific and observable terms.

A practice in education used to enhance student achievement is called scaffolding. In theory, scaffolding is used to learn complex ideas through a progressive instructional process. Lemov (2010) refers to this concept as *Name the Steps*. He explains,

> If you are teaching in your area of skill and passion, you likely have more intuition (natural or learned) than your students do, and you can help them succeed by subdividing complex skills into component tasks the building knowledge systematically (p. 78).

Relating back to motivation, scaffolding provides students with the inertia to stimulate a willingness to learn by breaking down a subject into manageable parts. “Bandura’s research has shown that early successes are critical in keeping motivation alive” (Jones, 1997, p. 35). Edwards masters the pedagogy practice of scaffolding through her carefully sequenced drawings exercises. Small successes yielded from scaffolding can have a
profound impact. Student confidence is instantly gained in Edwards’ beginning drawing exercises.

**Signature.** In one of the first exercises Edwards has her students create is a signature of their name. Edwards chooses a signature because it is not commonly associated in art production. This is imperative for students who experience low efficacy for the arts because, “efficacy beliefs are typically assessed prior to engaging in a particular task or activity” (Pajares & Urdan, 2006, p. 48). The signature exercise not only acts as the beginning phase of scaffolding, it also serves as a hook. A hook is a technique for delivering instruction by serving as an attention getter; what is interesting about a lesson (Lemov, 2010). Pictures, poems, riddles, can all serve as attention getters for a lesson. In this case, Edwards uses the analogy of a signature as it relates to drawing. Edwards explains to her students, a signature is constructed from the most basic form of art, the element of line. It is universal yet unique and individual to the artist. Furthermore, relating to art, visual literacy can be expressed in this most basic form. We as audience members can gain non-verbal visual feedback from in which a person signs their name. A person can generate assumptions of a person’s personality from the line quality and depictions of the letters. Edwards reinforces her signature analogy by making the point since everyone is capable of signing their name, they too are capable of drawing. Signing their name, though considered basic, can have a profound impact. It is in this first basic exercise where Edwards begins the technique of scaffolding; starting out simple and proceeding to more difficult and intense drawing tasks. When students begin to see that they can draw through the exercise of signing their name, they are more willing to engage in future drawing exercises.
**Faces and vases.** The next drawing exercise increases in difficulty. Before completing the proceeding exercises, Edwards primes her students. Edwards explains the functionality of the brain and the conflicts beginning artists experience when drawing from observation. She explains, it isn’t their inability to draw, it is how their brain has learned how to processes visual data. Our brain resorts to stored visual memory when facing obstacles or challenges in drawing instead of processing visual stimuli accurately. She reinforces that drawing from perception requires a shift in cognition in explaining the L-mode and R-mode theory. Then students experience this phenomenon first-hand during the *vase and faces* drawing exercise. Edwards uses a famous optical illusion, which is perceived as a vase from one perspective and a profile of a face from another.

**Figure 2**

*Faces and Vases Drawing Exercise*

She has students complete the other half of the face. In order to do this they have to mirror the half of the image which creates a symmetrical image, see Figure 2. Edwards acknowledges the challenge of this task, “Nearly all of my students experience some confusion or conflict while doing this exercise” (Edwards, 1999, p. 51). Though this task
is challenging, causing confusion and even paralysis (Edwards, 1999) it is successful because students experience firsthand how drawing naturally requires a shift in cognition. Edwards proves her point by having her students complete this drawing, by carefully balancing the progression of scaffolding.

**Drawing upside down.** Edwards’ students have now experienced the cognitive shift needed to be successful in future drawing endeavors. She acknowledges the confusion generated from the *faces and vases* exercise, how effort will not be sustained if she does not offer further solutions other than a cognitive shift. She proposes drawing upside down. Upside down drawing is a technique that abstracts an image, which seems like a paradox for observational drawing. Her theory to why this drawing method is effective is that it forces the artist to look at the basic components of the image. Rather than trying to decipher the subject matter, which could invariably cause the artist to make assumptions drawn from stored memory, the artist is forced to observe how the lines intersect, directions they’re headed, and shapes they create. While any drawing will suffice for this exercise, Edwards uses a reproduction of Pablo Picasso’s Igor Stravinsky with her students. Drawing upside down allows students to focus on simple forms, rather than concentrating on perceived difficult areas. Once the drawing is oriented upright, the perceived “difficult” areas, such as, foreshortening and the face are reproduced true to the original (Edwards, 1999). The outcome of the drawing is increased confidence among her students.

Like Edwards, I too have experienced an overwhelming amount of success when I have my students complete this task. At first, they think the drawing is ridiculous, wondering, *why is she asking us to draw upside down?* However, once they get engaged
in the drawing processes, and in turn experience the cognitive shift Edwards attests to, they replicate the drawing quite well. Being able to successfully reproduce a “challenging” drawing created by a renowned artist gives students a feeling of achievement. Drawing upside down is one of many strategies Edwards teaches her students that result in increased efficacy.

**Five perceptual skills.** According to Edwards, drawing can be subdivided into five basic skills. These skills are: the perception of edges, spaces, relationships, light and shadows, and the whole or gestalt. Edwards creates a series of exercises surrounding these skills. Lessons are scaffolded by beginning with one skill, adding to it, and then eventually addressing all of the skills in future tasks. To develop the perception of edges for example, Edwards uses the subject of the human hand. In this exercise, students use a viewfinder in Figure 3 to draw their hand in a complicated or foreshortened view.

**Figure 3**

*Illustrating the Perception of Edges in Drawing a Hand Through a Viewfinder*
This is a tool which allows students to flatten an image, by drawing a three-dimensional subject through a plastic film. The view finder serves as a picture plane, “an imaginary transparent plane, like a framed window, that is always hanging out in front of the artist’s face, always parallel to the “plane” of the artist’s two eyes” (Edwards, 1999, p. 99). The picture plane is an essential concept for artists to understand, but it is also an abstract idea to grasp (Edwards, 1999). “These devices seem to work like magic in causing students to “get” what drawing is—that is, to understand the fundamental nature of drawing perceived objects or persons” (p. 99). The view finder, picture plane allows students to see firsthand how the three-dimensional world translates on a two-dimensional surface. Concepts learned in this exercise are expanded upon in the next lesson.

To set students up for success, Edwards, relies on skills with which students have had prior success. To introduce the perception of relationships, Edwards uses a grid drawing method. The horizontal and vertical lines seen in Figure 4 and Figure 5 represent, “the two constants that the artist absolutely depends on to assess relationships” (p. 99). The artist can see relationships in the subject, in this case the hand, when perceiving the horizontal and vertical axis. To begin this exercise, students must have drawn a hand onto the actual picture plane seen in Figure 4. On a separate sheet of drawing paper, students will first lay down a layer of graphite. This will tone down the brightness of the paper beginning the initial steps of shading. Students measure the same format as the picture plane including the horizontal and vertical lines. Using the picture plane as a reference, students will translate the contour lines that form the hand paying close attention to their positioning in the picture plane. The grid drawing method is a
perfect example of scaffolding, in the way it compartmentalizes the drawing into manageable parts (see Figure 5). It is easier to use a grid then to draw from life and it is more difficult than tracing on a picture plane. Progressively, students will learn how to draw without the picture plain while learning new concepts and strategies.

**Figure 4**

*Finished Drawing on Picture Plane*

**Figure 5**

*Drawing Using a Grid*

Once students complete the grid transfer, they are encouraged to draw from life rather than drawing directly from the contour drawing on the picture plane. The contour drawing apparent on the picture plane depicts the edges and proportions of the hand, but neglects to show critical details such as lightness and shadows. Students will use their actual hand as a reference, repositioning it as it appears in the picture plane. Erasing areas out of the image create highlights, while shadows are added to darken the image.

From these two lessons, students have learned the perception of edges, relationships, and shading. In addition the lesson design was structured by difficulty
level to build skills progressively. Through scaffolding skills, students can reach autonomy in art. Edwards explains, “from now on, each time you pick up a pencil to draw, the strategies learned in this drawing will become better integrated and more “automatic”(p.110). Throughout Edwards’ instruction, the five skills in drawing are addressed and practiced. Scaffolding a lesson is one method that has proven to be effective in drawing, and paired with a set of skills chosen to develop, also useful in building artistic efficacy.

**Priming**

A sense of mastery can be achieved when learning is maximized to its fullest potential. Priming is a method used to increase efficiency and cognitive processes. Priming is used within the first minutes of a lesson or even weeks before to prepare students for the content being learned. Jensen (2005) explains the benefits of priming, “It accelerates the understanding of concepts and gives the brain information to build into a more complex semantic structure or hierarchy later on” (p. 40). Unsworth (2001) acknowledges the effectiveness of priming in observational drawing, indicating that perception can be enhanced by stimulating or priming memory. Edwards knows that a common error in portrait drawing is in correctly articulating proportions, so she primes her students with an activity that will give them a deeper understanding of the subject of proportions. The perceptual phenomenon which she has termed the *chopped-off-skull* is the tendency to place the eyes higher on the skull than they anatomically are. To prepare students for success, Edwards begins with the measurements of the skull. She has her students measure the placement of the eyes in accordance with the skull. Students avoid making misplacing the eyes because they are primed with the correct position.
I have used priming for teaching the conventions of Western linear perspective. For beginning artists, it can be difficult to understand surfaces visible to the viewer. I enhance students’ understanding using visual clues. At the beginning of the lesson, I hold a box out in front of the class in various positions; below, above, and at eye level. This visual gives meaning and signifies to the horizon line, allowing students to work toward more complex ideas. I use priming as often as possible because it prepares students for learning, and deepens their understanding of the content. In addition, it is also very simple to do and takes little instructional time and planning. The rewards from priming can provide students with the confidence necessary to master the material.

Edwards increases students’ efficacy in intentionally crafting lessons to the optimal level of difficulty. Students monitor their progress, in pre and post-instruction drawing excises, validating growth. Throughout the course, Edwards scaffolds skills, from the signature exercise to the five perceptual skills. Finally, priming prepares students to deepen their understanding of the content. This section focused on exercises students could engage in to develop their efficacy. The next section will discuss ways to improve efficacy through the observation of others.

**Vicarious Experiences**

A vicarious experience is when learners observe others perform a task. In theory, students assess their efficacy through social comparisons and knowledge from others succeeding at a task (Pajares & Urdan, 2006). Vicarious experiences can be gained in observing adults and peers model a behavior. Although this source of efficacy is not as powerful as an actual performance, the vicarious experience of modeling is a strong predictor to instill efficacy. Pajares and Urdan (2006) indicate that “Modeling is one of
the most important ways to promote learning and self-efficacy” (p. 64) (as cited in Schunk, 1981, 2003; Schunk & Hanson, 1985). The following will discuss various modeling methods Edwards uses, how mistakes can be beneficial, modeling through peers, and copying masters to obtain a vicarious experience.

**Adult Modeling**

Edwards models instruction before she has her students complete the task (Jones 1997). Parks, (1992) emphasizes the importance of the art instructor as a communicator, noting that “To communicate about art effectively, the teacher must demonstrate and inspire empathetic responses in students if they are to grasp the meaning and signifcates of expressed ideas” (p. 54). Actual demonstration of ideas is more effective than presenting concepts in a lecture. When students observe a visual demonstration, the task appears more achievable. Students may think ‘this is how the teacher experiences success, so if I employ the same behaviors, I too can have similar results.’ In teaching her students relationships of drawing, Edwards demonstrates how the “Basic Unit” can assist an artist in establishing correct proportions in a picture. She explains,

The Basic Unit is a “starting shape” or “starting unit” that you choose from within the scene you are looking at through the Viewfinder (the sailboat on the water). You need to choose a Basic Unit of medium size—neither very small nor very large, relative to the format. In this instance, you could choose the straight edge of the sail. A Basic Unit can be a whole shape (the shape of a window or shape of a negative space) or it can be just a single edge from point to point (the top edge of a window, for example). The choice depends only on what is easiest and easiest to use as your Basic Unit of proportion (p. 124).
After Edwards communicates what the Basic Unit is, she demonstrates the application of the concept in an illustration of a boat. In this example, Edwards selects the straight edge of the sail as the Basic Unit, seen in Figure 6. A pencil, or in this case, the end of a brush can be used to establish the length of the Basic Unit. Such a tool can be held marking the top of the unit and a thumb indicating the bottom, illustrated in Figure 6. Holding your thumb place, the artist can measure other elements compared to the Basic Unit, such as, the length of the boat in Figure 7. As you can see, the length of the boat is slightly longer when compared to the Basic Unit. All of the proportions in this picture can be determined by a unified standard. Edwards does an effective job modeling and communicating this method. Not only does she increase students’ efficacy through this demonstration, but she tells students that most experienced artists use it. Both models from experienced art instructors to masterful artists can be used to vicariously support self-efficacy.

**Modeling Mistakes**

There is increasing pressure to deliver the perfect lesson, from mandated teacher
evaluations, upheld by state-wide accountability. However, is perfection a realistic goal in art education? We are doing our students a disservice if we model the perfect demonstration without flaws or errors. False illusions generated vicariously can be detrimental when it comes to an actual performance. When students engage in the task being modeled perfectly, they have the expectation of perfection. When students encounter difficulties, they can easily become frustrated with little clues as to how to solve visual problems. This can be problematic especially for individuals with a fixed mindset (Dweck, 2006). Failures can easily be read as a lack of inability, but learning is a process that should be attributed to effort. Teachers should not be embarrassed if they do happen to make mistakes during demonstrations, but instead should embrace it as a teachable moment. In fact, effective teachers normalize error in modeling mistakes and corrective actions. Lemov (2010) explains the importance of normalizing error: “getting it wrong and then getting it right is one of the fundamental processes for schooling” (p. 222). Showing how great artists make mistakes will ensure students with a level of efficacy. Unsworth, (2001) explains,

When looking at drawings from great artists, to see that often they are “thinking with their pencil.” Seeing the many “wrong” lines in a Matisse or Delacroix drawing—lines they drew and then rethought and drew again— is an important way to encourage students to risk drawing and not to be inhibited by fear of “messing up” (p. 8).

Edwards shows examples of great artists’ earlier mistakes and growth in their drawings.

During the first two years of that decade, Van Gogh did drawings only, teaching himself how to draw. As you can see in the drawing of the carpenter, he struggled with problems of proportions and placement of forms. By 1882, however, two years later, in his Woman Moring, Van Gogh had overcome his difficulties with drawing and increased the expressive quality of his work (p. 172).
According to Jenson (2005) most learners have preexisting prior knowledge that is incorrect. It is important to address false assumptions and how to correct them. In Van Gogh’s first attempts at portraiture, he had made false assumptions about proportions in the face. Showing mistakes made from masterful artists provides students with the confidence that it is okay to make mistakes. This teaches students that masterful artists were not merely born with a “talent.” They too had to develop their skills through practice and effort. Edwards uses the masters to prove it is unusual to attain perfection the first time you practice a skill. In addition to using mistakes made by masters, Edwards reinforces this concept in showing examples of past student’s growth.

**Peer Modeling**

The tasks involved in creating artwork often appear more attainable when using examples of peer’s successes than successful work from adults or masters. According to Schunk (1987) and Schunk, Hanson, and Cox (1987),

The impact of a model on self-efficacy beliefs will be strongest when observers believe that they can be successful if they follow the model’s behaviors and if they believe they are similar to the model in terms of age, ability, and gender (Pajares & Urdan, 2006, p. 64).

After Edwards’ students complete the pre-instructional portrait drawing exercise, she shows examples from past students’ before and after drawings. She uses the vicarious experience in showcasing peers past successes to strengthen student’s efficacy. Work from past students is selected from both genders and varying abilities and ethnicities. I, too, have found this method successful in teaching a specific skill, such as portrait drawing. The reactions from my students have been positive, instilling the belief that they could also share similar outcomes.
There are times that showing past student work is ineffective, especially when teaching the skill of creative problem-solving. I have found that if I am teaching a project that lends itself to open-ended solutions and personal interpretations, students will model their work from past students. In a lesson where students had to invent a comic strip, I initially showcased past students’ work. My intention was to provide inspiration for the assignment, but instead I noticed students relying on the examples instead of developing their own ideas for the assignment. Now I do not show any student examples with that particular lesson, and since have found that their creative interpretations have been vaster and more personal.

As indicated above, copying can be an outcome when showcasing student work. It is important for instructors to consider the intentions and goals of the assignment when deciding to present examples from past students. Copying is not necessarily considered a negative exercise especially, when used to promote efficacy.

**Copying Masters**

Copying as a form of molding has been used by significant artists such as Leonardo da Vinci and Roy Lichtenstein (Kozlowski and Yakel, 1980). This approach of learning through copying is a controversial topic in art education, but has its merits for strengthening efficacy. “Lowenfeld cautions at some length against all forms of copying or imitation, working from models, and influences drawn from adult art” (Burton, 2001, p.34-35). Burton (2001) criticizes Lowenfeld’s approach since he offers no insight for developing children’s capacities to investigate the world through observation. Drawing through observation serves a purpose, Burton explains, “Observation drawing invites direct inquiry and investigation and offers new knowledge about self and world for
contemplation in the present” (p. 35).

Kozlowski and Yakel (1980) suggest that copying can in fact support creativity and that “by copying exemplary models the child will be able to add to his repertoire of techniques and as a result open for himself a new dimension for expression” (p.26). Students can experience how others translate the world through the act of copying.

Edwards, along with Kozlowski and Yakel, support copying as an effective method for improving confidence, noting “I can practically guarantee that carefully copying any masterwork of drawing will forever imprint the image in your memory” (Edwards, 1999, p.178). Edwards explains the effectiveness in copying, “(it) forces one to slow down and really see what the artist saw” (p.178). Copying is a method used throughout Edwards’ instruction. Students are instructed to copy works such as John Singer Sargent, Mme, Pierre Gautreau, 1883, Pablo Picasso, Portrait of Igor Stravinsky, 1920, Gustave Courbet, Self-portrait, 1897. Edwards purposefully selects works of art that highlight a skill; for example, light and dark are emphasized in Courbet’s self-portrait and proportions are investigated in Sargent’s portrait. These drawing exercises serve as a means of practice and to strengthen perception; they are never the end-all-be-all or meant to simulate the imagination. Of course there are limitations in copying, however, with the intent of promoting efficacy and perceptual skills, imitation can serve as an effective teaching strategy.

I, like Edwards, use reproductions from masters for students to imitate as warm-up activities. I have witnessed students feeling a general sense of satisfaction with their drawings when copying during a warm-up exercise. The benefit of using the copying method as a warm-up activity is that it gives students an immediate focus at the start of
the bell, which boosts the speed of starting and in turn, efficiency. Efficiency in the classroom can yield more opportunities for practice which in-turn provides more opportunities to master a skill, fueling efficacy.

To summarize, efficacy can be gained through observing others succeed. Vicarious experiences can take the form of copying proficient peers, adults, and masterful artists, and modeling is the strongest method to achieve a vicarious experience. Peers are more effective than adults to increase students’ efficacy because they share similar ages. Demonstrating mistakes and how to make corrective actions will give students a sense that error is a normal part of the learning process. Copying work from masters and showing past students’ work should be thoughtfully integrated into the curriculum; if used correctly both methods can be effective for instilling perceived competency.

**Forms of Persuasion**

Influential role models such as parents, teachers, and peers can provide individuals with positive encouragement to support their efficacy beliefs. Phrases such as, *outstanding job,* or *you can do it,* are beneficial for motivating learning and sustaining efforts through difficulty. Such phrases can enhance efficacy to an extent. However, these forms of verbal persuasion can have limited effect if the person receiving positive affirmations encounters continuous poor performances, or losses the connection of praise and behavior. Providing specific praise that links performance with strategy use has demonstrated to have more of an influential effect than generic praise alone (Pajares & Urdan, 2006). There are many facets and forms of feedback in the art room. Feedback is exchanged from teachers to students, peers to peers, and students’ to themselves in self-evaluations, and provided most frequently at the end of a lesson in the final product.
According Low (2015) feedback is most beneficial if it is provided not only in the finished product, but during the process and progress. Intentional and thoughtful feedback can increase students’ confidence promoting ownership in the learning process. This section will focus on how to effectively form student’s efficacy in addressing students poor self-evaluations, the assumption of art as ability, reinforcing effort, and effective uses of feedback.

**Student’s Self-evaluations**

Edwards uses verbal persuasion in effectively acknowledging students’ dissatisfaction from their pre-instruction drawings. Often her students will express disappointment with their pre-instruction drawings, claiming they have a “childish” appearance (Edwards, 1999). She first acknowledges expressions of defeat. This recognition is essential to validate students’ thoughts and to build trust.

My students have expressed similar feelings about their drawings. I can recall attempts at persuading them otherwise, for example, *no, your work does not look horrible, just keep trying and you will improve*. In this case, they usually refute my statement, by referring to their work and sarcastically saying *do you see this!* I have found disagreeing with how students feel is usually ineffective. I have also tried giving generic praise or guidance such as *just stay positive, don’t put down your work*, and ignoring their negative critiques. My attempts at verbal persuasion have failed. What I believe is effective with Edwards is that she does not disagree or necessarily agree with what students are feeling, but she acknowledges the feelings instead of ignoring or passing her own judgment. She simply recognizes that it is a reaction some of her beginning artists have, and provides an explanation why they might be feeling this way.
In addition to recognizing her student’s dissatisfactions, Edwards offers reassurance for future success. She explains that once students gain knowledge in perpetual training their drawings will reflect a sense of maturity and sophistication. It is not their inability to draw, creating a “childish” appearance; it is their reliance on stored visual memory, or schema established in Schematic stage of artistic development. She offers to her students a clear explanation how visual symbols are developed in childhood. Edwards goes on to explain how our brain stores and labels visual memory. To break through our symbol system we need to look at objects in a different perspective. The reassurance Edwards provides her students perpetuates self-efficacy. As a result, students become optimist for future growth.

**Art is a Teachable Skill**

The concept that ‘art is a teachable skill’ is a continuous theme through Edwards’ instruction. In attempts to dismantle the association of art and talent, she reiterates to her students, being able to drawing is not a magical ability. She cites that even artists perpetuate this notion of artistic abilities being ‘given’ rather than developed. When asking artists how they achieved such realism, Edwards says their responses vary, from not knowing exactly how, or stating that it must be an inherited gift (Edwards, 1999). Edwards explains how this attitude is detrimental,

While this attitude of wonder at artistic skill causes people to appreciate artists and their work, it does little to encourage individuals to try to learn to draw, and it doesn’t help teachers explain to students the process of drawing (p. 3). Edwards assures her students that everyone can draw, “Contrary to popular opinion, manual skill is not a primary factor in drawing” (p. 3). Edwards (1999) compares learning to draw to learning how to write, thread a needle, ride a bike, and catch a
baseball, which helps illustrate that drawing utilizes approaches that are logical and straightforward, not just inherent or magical. These statements encourage students that they will be successful once they learn how to visualize forms, which requires learning how to process visual information from a new perspective.

**Effort vs. Talent**

Dweck cites that 80 percent of parents reported it is necessary to praise children’s ability to foster their confidence and achievement (Dweck, 2006). However, such positive forms of appraisal can be detrimental for future growth. Dweck (2006) conducted a study on hundreds of adolescents where participants received ten relativity difficult questions from a nonverbal IQ test. After they finished these questions, one group of participants were praised with their ability using words, such as, *talented* or *smart*, and the other group was praised by their *effort*. Both groups scored the same, with eight correct on the first assessment; however, after their praise, their scores began to differ. When offered to complete a new set of IQ questions, the group that received praise associated with talent, rejected the new task, in fear of failure. “In contrast, when students were praised for effort, 90 percent of them wanted the challenging new task that they could learn from” (p. 72). This study confirms the power to praise. Teachers need to be careful in the praise they provide their students. What we may think is encouraging growth could instead have the opposite effect. By contrast, praising students for their effort removes the association of art and talent, which is often perceived as a fixed entity.

**Praising Principles**

Along with praising student’s effort, Segal (1991) identifies effective principles of praising which he developed through educational action research. Praise should be
timely, so students can associate the praise with the given behavior. “Random praise, disconnected from the praiseworthy behavior, is not likely to have a reinforcing effect” (p.145). Blanket or generic statements are also less effective. Praise must be specific, referring directly to their accomplishments. Praise because you admire a specific behavior of a student, not to generate desired behaviors from students who are producing less desirable ones. Be careful not to overuse praise because it can lose its authenticity. In conjunction with authenticity, praise should not be used as a calculated ploy. Our enthusiasm and sincerity is most important, students can perceive if our motive is indeed genuine.

Although this section focused on verbal persuasion principles for teachers to influence student’s efficacy, it should be noted that peers and family members are valuable contributors. Constructive praise and feedback can motivate and build confidence in learning. Internalizing control in the learning process is instrumental for gaining efficacy. Instructors need to promote the belief that art is a teachable and learnable discipline. Providing a sufficient explanation as to why students may doubt their skill is useful reassurance to boost chances of future success. In praising effort, students will begin to associate effort with skill rather than thinking that skill is constructed by chance or from talent. Feedback should be ongoing in the art room, but praising in itself is an art form to be practiced and mastered. Timely and specific praise can have beneficial effects in promoting efficacy through persuasion.

**Physiological Reactions**

Imagine being called on by a teacher to answer a question you don’t know the response to. In muddling over a response and stalling while it fails to generate, intense
silence has resonated the classroom. Time feels as though it is standing still. Paralysis begins to set in as you feel an overwhelming sensation of self-consciousness about what your peers will think if you attempt to fumble out a response. Physiological reactions begin to occur. You begin to feel red in the face, breathless, and your heart beating at rapid speeds. At this point you feel inebriated from the predatory threat of fear.

In just the past ten years, educational researchers have been increasingly interested in the role of emotions and learning (Jenson, 2005). Jenson claims researchers in the field of education have avoided studying emotions and learning for fear of scrutiny. It has previously been assumed the mind, body, and emotions are separate, which is perhaps why Edwards neglects to mention emotional states in her drawing instruction. Today though, it is accepted that emotional states are not separate. Jenson states,

Today’s neuroscientist are breaking new ground in helping us understand why emotion is an important learning variable, and how the affective side of learning is the critical interplay between how we feel, act, and think. Mind and emotions are not separate; emotions thinking, and learning are all linked (p. 68).

Izard (1998) describes emotional states as our experience with emotions that enable us to prepare for events (as cited in Jenson, 2005). Emotional states shape our efficacy beliefs. Physiological reactions from learning events, such as skin reactions or rapid heartbeat can be interpreted as ineffectiveness (Pajares & Urdan, 2006). A negative association with a subject instigated by physiological reaction can imprint into our memory. Emotional states are difficult to shut down once aroused because of the release of rapid chemicals in the brain that spreads to other parts of the body. “Messenger molecules known as peptides not only are distributed throughout the brain and body, but also exert a far greater influence on our behaviors than previously thought” (Jenson, 2005, p. 71). I will
review both the negative and positive emotional states that occur in learning. Once we have knowledge of these states we will have a better understanding as to how educators can influence learners.

**Negative Emotional States**

Jenson has loosely classified fear, threat, stress, sadness and disappointment as common emotional states that may occur during learning. According to Jenson fear is usually interpreted from a threat. “Common threat-linked experiences that student’s encounter in school, include peer pressure; serious deadlines with significant consequences if missed; and being forced to stay after school, make reparations, or give public apologies” (p. 74). An outcome from fear could be stress. Jenson reports a moderate level of stress enhances learning, however, high levels of stress or distress, can be damaging. Distress as defined by Kim and Diamond (2002) include three factors (1) heightened arousal, (2) perception of the event as aversive and (3) loss of controllability (as cited in Jenson). Distress can cause students reduced blood flow to their frontal lobes leading to deficiencies in speech and working memory. Continuous amounts of stress can generate feelings of sadness and disappointment. Biologically, such feelings have a stronger imprint on our memory than feelings of joy and happiness (Jenson, 2005). Even though these feelings are not conducive for learning Jenson says occasional sensations of disappointment can propel motivation. Students may be motivated to work harder to avoid feelings of defeat. In general, negative emotions when paired with learning experiences can lead to students giving up in school.

**Positive Emotional States**

On the contrary, positive emotional states can drive learning. Positive feelings of
joy and pleasure can illicit excitement and curiosity in learning. Dopamine is a
“powerful and common neurotransmitter primarily involved in producing a positive
mood or feelings” (Jenson, 2005, p. 160) is dependent on school success. Dopamine is
released in such emotional states that support greater attention and focus. The powerful
neurotransmitter supports frontal lobe functions such as working memory, decision
making, and judgments. Dopamine can also help students decipher what is relevant in
learning and what is not. Anticipation and curiosity also cause an increase of activity in
the frontal lobes. In addition, Kirsch (1999) indicates a strong connection between
anticipation and the acquisition of new knowledge. To summarize, when students
experience these states they will associate a love and excitement for learning, which will
allow them to capitalize on their educational experience.

**Shaping Emotional States**

To improve student’s efficacy teachers should consider engaging positive
emotional states. Especially in cases where students have associated negative feelings
towards the arts. Using these practical yet effective practices can encourage positive
growth. Jenson describes numerous methods for enhancing emotional states. Asking
compelling questions that relate to students’ lives can spark curiosity. Compelling
questions can also take the form of big questions, not directed towards factual, automatic
responses, which will in turn trigger a deeper understanding of the content. Teachers can
model their love for learning in using enthusiasm and excitement when teaching.
Smiling, using humor, sharing an emotional story are all examples of how exude passion.
Incorporating physical movement into lesson will release dopamine, which has been
proven to enhance learning. It is beneficial to link celebration to learning. After
completing a final project, I have students share their work with others while passing around food dishes. Lastly, though it can be easy to get set in a routine, adding spontaneity to your everyday routine is important as this will help keep your students interested and engaged.

**Conclusion**

Efficacy can be influenced through four sources; mastery of experiences, vicarious experiences, forms of persuasion, and physiological reactions. I have indicated each of the four sources and their relevance, suggesting their application in the secondary art room. Student’s perception of their actual performance in experiencing mastery through art is the strongest of the four sources for shaping efficacy beliefs. In summarizing methods for providing a sense of mastery in the arts, perceptual instruction has shown to be valuable for increasing efficacy. I have offered numerous drawing practices from Edwards’ instruction that have shown usefulness in generating confidence in the arts. Edwards believes learning art through perceptual skills will empower individuality, which enables students to break through schema adopted in childhood development. Though this thesis focused exclusively on perceptual training to endorse efficacy, I fully acknowledge perceptual training alone is insufficient. There needs to a balance in the curriculum to develop skill and personal expression. Personal expression will make learning relevant and will fuel motivation. Without motivation, students can become reluctant to participate in the arts and their efficacy would be affected.

In concluding my thoughts, I first have gained knowledge of efficacy beliefs surrounding education. I have a greater understanding of the artistic stages of development that may inform efficacy beliefs. In researching ways to improve efficacy, I
have found an abundance of practical exercises to enhance efficacy in the secondary art room. The application of these exercises and suggestions will be used in all of my classes though I believe my beginning drawing class will see the greatest benefit. These classes have verbalized the most their artistic insecurities. I realize I am limited with the knowledge of the effectiveness of the exercises and suggestions I have offered. Assessments to measure student’s efficacy would be beneficial to measure the usefulness of each exercise indicated. Further research that includes measurements of student’s efficacy and the impact of such interventions would be useful.

Second, I have reconsidered my role as an art educator, as well as my pedagogy and practice. Although the foundation of this thesis is grounded in perceptual training, this is just one facet of instruction. The suggestions I have indicated above are just the beginning to generate fulfillment and satisfaction among all of my students.

Third, although I have gained greater insight surrounding efficacy beliefs, I am left with many questions and avenues for future research. A topic that deserves equal attention is the role of teacher’s efficacy in the art room. How does their perceived efficacy as an instructor shape our students beliefs? I feel confident I am now equipped with an adequate amount of tools to increase my student’s efficacy, but what about the students who choose not to take art? Just recently I had a new student approach me saying she dropped my class. When I asked her why, she said that it was because she is not “good” at art. Luckily I had the opportunity to convince her otherwise, but what about the students with whom I do not have such opportunities? How can I inform students, administrators, parents, and the community that art is not exclusively for the talented? For those students that do enter into my classroom, I look forward in
transforming their perceived beliefs. I hope to make a greater impact on their education not only in art, but in their future lifelong trajectories.
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