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ABSTRACT

Technology preserves the Worlds of Art, spreads heritages, and unites people across the globe, time, and diversities. Through inquiry, technology enables individuals to explore inherent values of art and cultural identity in a quest to interpret, understand, and create their own expressions of the world. Art educators realize that technology must become part of their lives to help prepare students to survive in a technological world. Technology preserves, yet limits art creation and expression. The fear is that creative expression will be erased. Creativity is controlled by man's ability to program, to pre-think, to capture the abstract meaning of his art in the hope that human complexity is assimilated into choices for individual expression. Art educators must make students aware that technology aids them to inquire and use software, but it does not allow them to free themselves from boundaries of captivity within their own thoughts. This paper shows that technology imprisons free expression and that art educators play a big role in challenging the influence of technology. The paper concludes that art educators, the central reform agents, need to become responsible in shaping students to remain liberators of creative expression using technology to preserve identities of the time. (Contains 45 references.) (Author/BT)

The Age of Technology: Friend or Foe to the Expression of Art?

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*A man who works with his hands is a laborer; a man who works
with his hands and his brain is a craftsman; but a man who works
with his hands and his brain and his heart is an artist.*

Louis Nizer

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Technology preserves the Worlds of Art, spreads heritages, and unites people across the globe, time and diversities. Through inquiry, technology enables individuals to explore inherent values of Art and cultural identity in a quest to interpret, understand, and create their own expressions of the world. Art-educators realize that technology must become part of their lives to help prepare students to survive in a technological world. However, Sabieh warns against the fear of erasing creative expression. Sabieh concedes that technology preserves, yet advocates it limits Art creation and expression. Creativity is controlled by Man's ability to program, to pre-think, to capture the abstract meaning of his Art in the hope that human complexity is assimilated into choices for individuals to express themselves with. Art educators must make students aware that technology aids them inquire and use software, but it does not allow them to free themselves from boundaries of captivity within their own thoughts. This paper shows that technology imprisons free expression and that art-educators play a big role in challenging the influence of technology. Sabieh concludes art-educators, the central reform agents, become responsible in shaping students to remain liberators of creative expression using technology to preserve identities of the time.

"All that we once moved through with our senses fully engaged now moves before us virtually, which deprives us of experiencing those parts of life that give it richness" (Becker, 1999, p. 17). The place of the arts in the world of technology or the impact of technology on the World of the Art still remains a topic of controversy. The attempt to clear up the haze that exists is to decide whether to classify technology as a friend or foe to the Worlds of Art. This can best be debated if there exists first and foremost a clear understanding of the definitions of art and creativity.

I believe that a definition of art must include in its essence the concept of art as a creation and art as a perceptual exercise to enable appreciation. June King McFee's definition of art, as clearly depicted by the Department of Art and Design website, Iowa State University (1999), stressed on the importance of art as a promoter of cross cultural commonalities and interconnectedness. Art preserves cultural heritage. According to McFee, art "involves creation or intended production resulting from action" (p. 1). Such action is basic to human behavior and derives itself, she believed, from "intentional motivation derived from ones desire to interpret and enhance the quality or essence of experience" (p. 1).

Moreover, Cohen (1999) noted, "every artist has known the experience of finding something happening in his work that he hadn't intended to happen" (p. 8). This something is not part of the artist's conscious manipulation of the work, but the discovery itself provides the artist with the motivation to explore new avenues of direction. Using such rationale enables the understanding of creativity to be an act of generating

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something or as the Reader's Digest dictionary defines it as "having the power or ability to create" (p. 315). To create an artist must be able to notice, remember, recognize and produce. Gardner (1983) discussed creativity as a way to apply intelligence. Thus, it implies that creativity, in its own right, must have the elements of originality and purpose in its making (Peterson 2001).

Hence, man explores the world around him making his own sense of art out of it and uses the machines to expose that which is explored. Pu and Lalanne (1996) ascertained that although the machine was not able to be as creative as man, together the machine and man were able to collaborate and produce rich environments of creative designs.

Drucker (1997) claimed that the 'dialogue of art and technology' had been in the forefront for more than ten to fifteen years. Accordingly, in her article, *Digital Reflection: The dialogue of Art and Technology*, she posited that it was no more a novelty to see or use the computer in the Worlds of Art; however, the search for a way to better understand the partnership between the two continues in hope to account for ways to technologically parallel the element of the human imagination. The problem is that in whatever medium the art is in, the artist is expected to provide a communicative message laced with feeling and insight, which in a set up that is technologically supported may prove difficult due to the continuous change witnessed in the world of technology. Drucker (1997) further noted that as the world became more global and technologically oriented, artists needed to question whether or not with all the new technology available, artists produced new innovations to meet the new and more diversified audience.

For years now, an individual tends to rely on machines to process cognitive dilemmas by breaking them down into simple givens. However, this is possible due to man's ability to first create the programs needed to enable such solving endeavors to happen (Sabieh, 2001c). The quest of Artificial Intelligence research is to find ways to deal with man's diverse and complex thinking to reinterpret it in ways to create interfaces to enhance the man-machine collaboration with the hope that one day, the machine surpasses all that man can do to provide man with richer forms of living environments (Sabieh, 2002c; 2001c).

To date, machine-creativity.com, a website that deals with machine creativity issues, acknowledges that as "as an area of research, machine creativity is still very much in its infancy" (p. 1). Yet, creative limits continue to be challenged in the World of Entertainment. In the article, *Technology Bonds with Creativity*, Capital Markets (2001) informs the readers "creative content is increasingly being handled in digital form" (p. 1). The use of technology to produce visual effects "enables creative people to achieve today what was just an impossible vision a couple of years ago"(p. 1).

Machine-creativity.com site addresses the idea that types of programs created by man for the technology can be used for "creative tasks"; however, for the program itself to be considered machine creative or machine inventive in nature would be incorrect since it does not perform in a creatively fresh way. "All programs," the site declares, "are essentially algorithmic" (p. 2).

Thus, I believe man's creative thinking is based on a process of relationships, with both conscious and subconscious processes operating (Freud, 1959). As such, the

creativity becomes a measure of perception that underlies the complexity of human thought and feeling (Cropley, 2001; Goldstein, 1999). The individual is able to look at an object in a number of ways. He can perceive it as a whole or a part of a sum; as a result of a given, as a form of subjective beauty based on self expression, as a interaction of meaning combined to define the dynamics of a personality, as a solution to a dilemma, or as an alternative to an unknown based on an individual's inability to find a concrete interpretation of his subjective relation to the environment he lives in (Atkinson et al., 2000; Goldstein, 1999). All such perceptions give him meaning. The creativity of man takes on forms or levels derived from mental states outside of consciousness, but that find their way into awareness as the individual finds mediums to express himself in (Atkinson et al., 2000; Freud 1958).

The purpose of this paper is twofold. First, it is to show that technology imprisons the very act of free expression, and second, it is to acknowledge that the art educator plays a role in challenging the influence of technology in the lives of his students to help them preserve the human quality of thought and inquiry.

Today, globally, there has been a move to, blindly, integrate technology into the Arts Curriculum in the many institutions of learning. Moreover, there has been a move to raise awareness amongst the masses to understand the relation between technology and the arts based on the recognition that the more engaged the students are in the Worlds of Art, the better achievers they tend to become overall across the curriculum; this, it seems, is especially the case when technology is at play in the overall learning equation (Sabieh, 2000c; 2001b). To accommodate such student motivation, many institutions are physically adding on buildings to what already exists on their campuses or they are modifying and renovating what premises exist. Other initiatives seen have been focused on ways to upgrade the existing technology they already have available for use. Along the same lines of thought, Stipp (1997), in his article on Wurman, the Access guidebook founder, exposed Wurman's philosophy of education and related it to technology; "Technotainment", accordingly was what he believed would allow individuals to indulge their interests and learn at the same time since as humans, Wurman stressed, students tended to remember what they were interested in (p. 113).

The adoption of technology was seen as essential. But the literature notes that the integration of technology did not always lead to positive learning outcomes (Kulik & Kulik, 1991). There are times when technology facilitates and there are times when it hinders (Biggs, 1991).

The technology must be perceived as a tool for man to use in partnership to enhance his learning process (Sabieh, 1998).

Cohen (1973) in his article, *Parallel to Perception: Some Notes on the Problem of Machine-Generated Art*, acknowledged the computer as a tool, which he noted, "serve generally to extend or delimit various human functions" however, he went on to say that computer programs, if "structured appropriately" would enable the technology to have the "power to perform functions which parallel those of the mind itself" (p. 1). However, for that to happen machine autonomy, according to Cohen (1973) had to develop in such a way to allow systems to be programmed to maintain flexibility to process input

information through a decision making process that entailed support of diverse human perceptions (Cohen, 1973).

Computer, to date, cannot perform such acts. The computer must be programmed, based on artificial intelligence research attempts to carry out such complex analysis to imitate the human perceptual development. Cohen, (1990) an artist himself, believed that if an individual acknowledged and analyzed how his acts were processed, then these acts could very simply be interpreted into computer design that would allow replication of creative acts within a focused environment. To date this has not been possible to parallel human complexity. Cohen's success with AARON, a simulated painter, was based on such a philosophy. But it, too, has its flaws.

Machine creativity, according to Cohen (1990) did not need to experience the world around it to know it. He said, "for people, the acquisition of knowledge is cumulative" and the knowledge must "refer back to an experience" which they experienced "with their bodies, their brains, their reproductive systems, which computers do not have" (p. 2). Given that, computers do not interpret as man does, but they do encode the data input in a way that is more accurate. Man has emotions to accommodate what he interprets; the computer does not. The computer draws on what it has been given to work with as it synthesizes and generates an outcome. Cohen (1994) noted that no matter how developed AARON's program set up became, it "would always need to know what it was doing, and the key to what it would be able to do would always be constrained by the ways it would represent, internally, what it had already done" (p. 2).

Thus, machine creativity is based on the individual inputting knowledge represented in appropriate program language to generate the quality functionality of the technology in question (Cohen 1994). The outcomes generated by machine creations become reinterpreted by the individual and he, in turn, gives it new artistic meaning.

The complexity of man as a thinker of abstract and concrete terms is what enables him to assimilate and accommodate the world around him in a way that he builds and creates schema based on experience or basic maturation processes (Piaget, 1952; Gage & Berliner, 1991). To imitate or to create a machine to do such acts will not be able to address the complexity or diversity question of man. The technology itself will not be able to account for pre-thought or spontaneous thought, that defines the essence of man's being and functioning as he moves within his world.

An individual must first perceive, must first have a vision of an object, to then resort to a way in which to encode the object to preserve it and reproduce the perception. He finds a way to represent the interpretation of his senses to embody his vision. Technology may be the medium he chooses to make his statement with. The technology is a means for the individual to exploit his message within.

The question here is whether or not the technology itself controls human thought and action or whether, as a tool, it is used to advance human thought and action.

The Worlds of Art and Science, Biggs (1991) believes, get together through the World of Technology; yet the very essence of the meeting point results in divergence between rationale and assessment.

I believe technology is the ideal tool for the art educator to use for inquiry.

I believe technology preserves the Worlds of Art, spreads cultural heritages and identifies messages, and unites the people across the globe, across time and across diversities. As an educator, this is where I believe technology's true value lies.

Technology "itself is not a cultural determinant..." Biggs (1991) remarked, "it is the invention of a particular culture—a cultural expression...the relationship between culture and technology ...[is] multi-dimensional and hyper-spatial" (p. 1). As such, it preserves the art, but it does not take ownership of the original work since it does not possess the physical nature or signature of the original art in question (Biggs, 1991).

Technology preserves the original work in its cultural and historical moments. This provides students in the field with a medium to experience the work with the real feeling. Ippolito (2001), media arts curator at the Guggenheim Museum in NY city, in his article, *The Medium Is Not The Message*, discussed the importance of preserving the arts, especially media art, in appropriate mediums of the time, using behavior defined terms to describe the mediums as opposed to type defined terms since mediums within the Art world would become obsolete. Moreover, Frohne and Katti (2000), in their article, *Crossing Boundaries in Cyberspace? The Politics of "Body" and "Language" after the Emergence of New Media*, discussed the idea of change in the body and language of Arts since with the impact of technology there was a move to a more decentralized, interactive and intercultural medium of active and unlimited message exchange loaded with cultural, political, and social innuendos. Thus, it is important that with the redefinition of the art works in question, there is maintained a move to provide, during the preservation endeavor, an approach to ensure appropriate communication and globalization, yet, at the same time, a preserved original image to send out via the Internet to show cyberspace as one world, as one network.

Through inquiry, technology enables the individuals of all ages to explore the inherent values of Art and cultural identity in a quest to interpret, to understand, and to create their own expressions of the world.

Sites on the World Wide Web, software, or compact discs, given the human factor preferences and characteristics, will offer advice and guidance as the individuals set out to fulfill their different objectives, be it for learning, teaching, project or job related situations.

Johnson (1998) even noted that software existed to enable Internet shoppers to make right choices; however, he was also quick to note that such guidance would not replace situations where live human preference dialogue exchanges could take place.

Technology guidance, in general, to be accommodating to meet man's quests, needs vast amounts of stored data to make recommendations with accuracy. According to Lukkas (2000), in her article, *Oculus: Crossing Boundaries in Cyberspace, Art and Consciousness*, technology enabled the individual to explore the merging of the knowledge as interpreted by man's state of consciousness and the digital interactive work of the art object as portrayed in an interactive space. The merging takes on a separated identity as the body of knowledge appears to the individual as a "feeling of a feeling"—which Lukkas believed—was a "combination of corporeal, rational and emotional intelligence" (p. 14) to enable the individual to experience what the artist intended the focal points to be. Likewise, the technology is able to present art installations,

simulations or preserved art works, however, the technology does not mark the value of the whole art piece as the human being does when he perceives and experiences the effect of the same work (Lukkas, 2000).

It is important to stress, here, that the process of creating any artistic endeavor has a purpose, a goal, an objective, an intention; however, the technology itself collects and stores what it is ordered to select and encode; thus, the technology is limiting and selective in choice. As such, the technology may not preserve the artwork in the total context but in a predetermined focused presence. This leads to an interpretation of the sense data that itself is limited within the new context of exposure. As a result, the individual using the technology does not get a complete exposure to the work (Lukkas 2000). This connotes that the original work was present at the time of creation, but, due to the limitations of coding, the weight of the creation has been lost along the way of transformation and interpretation. Thus, man constructs and completes what he assumes was the original due to his ability to interpret and add his own subjectivity. This may result in a different perception of the artwork. Lukkas (2000) pointed out that “the artist’s body has been dematerialized and replaced with digital integers (p.17); once again enforcing the idea of the complex relation between the original body of knowledge, the technology and the individual perceiving the art. This becomes decisively more collaborative as global connecting of thoughts, actions and interactions remain top priority in most of the disciplines.

Over the years, the educator has come to realize that technology must become part of his life to help him as an art educator prepare the students to survive in a technological world. Although this is true, many in the field of education still fear of the use of technology (Sabieh, 2002a; 2000b).

Johnson (1998) commented that the fear of technology is not “that the slave technology grows stronger than us and learns to disobey our commands; it’s that we deteriorate to the level of the machines. Smart technology makes us dumber” (p. 67). Man fears, according to Johnson, to be portrayed as ‘dumber’ than his creation. I believe the fear is deeper than that.

It is true that man has programmed the computer to carry out many functions similar to humans (Sabieh, 2001c), but all the complexities of human thought, language or mental processing are not accommodated. I believe the fear is a personal fear that can be overcome through education and training (Sabieh, 2002a; 2001a; 2000b).

The real fear I warn against is the fear of erasing creative expression due to the world becoming more digital.

For example, many artists in the field of music creation perceived the invasion of technology into their world more as a threat to promote change in value interpretation. According to Mauceri (1997) introducing “new musical techniques [threatened] to displace not only the expressive order but also the values and institutions of the tradition. The performer, the orchestra, the concert hall and even the music critic were (and are still) threatened by the appearance of new techniques” (p. 189). Moreover, the music is perceived to lose the human touch as a result to produce material for mass consumption since it takes on an artificial face associated within the experimental world of technological fluctuations. The music created, Mauceri noted, became more valued as a

technical achievement as opposed to a musical contribution since the technology created a musical commodity transformed in accordance to the economy of technology, widening the band of possibilities due to machine creativity.

Furthermore, McKenzie (1994) professed, to perceive the computer as a presentation tool was to think from a human performance standard, which was reinterpreted to be based on conceptual displacement of a human act in another medium that paralleled the original one. The fear here is, that since the work has digital options, it becomes more machine maneuvered, perfect and synchronized and less realistic and authentic, removing its value from the original art creation. Machine creativity allows room for the artist to integrate human acts with in technology presentations, thus enabling the viewers of the creation to experience real time within technology 'controlled 3 D images and sound' mediums to give the impression of experiencing the world of reality from within the individual looking out. The work becomes machine created. The machine creations becomes archived along with the human created idea so that the very essence of the conceptual idea becomes preserved, enabling the work to become restored as a basic human act of creativity.

As a consequence, the fear is minimized since the power of the technology to give the feeling of control to man impacts itself on the freedom of man to then interpret the world, virtual or otherwise, around him as he sees it. Similarly to McKenzie, Bohn (1993) argued that art creations reproduced by technology or in photographs did not do the original work justice since it became influenced by the time, context, machine effects and impositions and interpreted thought. This may be true, but, once again, the actual preservation of the artwork in itself is where the value lies and it becomes the art educator's task to put it once again in its context to allow the students to gain the significance of the work.

I concede to the fact that technology is a very powerful tool that preserves the Worlds of Art, yet I advocate it limits the very presence of Art creation and expression.

In point, technology limits human creativity.

Becker (1999) noted that technology was able to impact the diverse works of art. As artists, specifically those in the field of design, become more and more technology oriented to integrating the use of the computer in their work, the outcome of the work becomes less original, creative and imaginative than what they previous used to create. Becker (1999) noted that there was a loss "of meaning on [the] emotional and informational levels" (p.17). What she claimed was that a lot of information within the cultural entourage becomes lost from the context, leaving it open for the viewer of the art to construct subjective meaning in relation to his environment. The artist's captivity of thought does not get translated and becomes entrapped within his own being.

This is, I believe, what needs to be addressed since the Worlds of Art has blindly accepting the idea that artists must become part of the clutch of technology allowing it to imprison the very act of free expression. This imprisonment must be challenged. It is here that I believe the art educator plays a big role. He is to challenge the influence of technology in the lives of the students to help them preserve the human quality of thought and inquiry.

Zwang (1998) in his article, *Imposing Presence*, noted that when a designer accepts electronic impositions when carrying out their work and saving the templates for reuse for similar job types, such imposition made the art work less creative and culture bound since it presupposed accepted assembly focus, minimizing the human factor. With time, Zwang believed such factors to be lost, incapacitating the individual to judge the quality of the work as interpreted by the senses. This should not be the case. The art educator has a responsibility to redefine what qualities make for “art and creativity” to enable the students to understand the value of their art world and their endeavor to learn about it to become producers in it.

Creativity is controlled by man’s ability to program, to pre-think, to capture the abstract meaning of his art in the hope that the facets of human complexity are planned for and assimilated into choices for individuals to express themselves with.

Man creates programs based on the assumption that the needed codes are available for design (Cohen, 1999). However, the outcome, a facet of complex human thought is not solely based on an outcome of conscious human or computer awareness—it is based on inputted evidence that is transformed into a result that creates a motivation to act on the implied implication of the outcome implication. For a computer to also act in the same manner as man, it would need the acknowledgment that the created program makeup has the potential to analyze, decide and act.

Man does not have answers to explain his complex nature. The computer does have answers to explain its acts—it resorts to exposing the designs man has given in its conception.

The creation of an artwork is not solely founded on preplanning since it encompasses spontaneity and timelessness. The computer program cannot afford not to have such a desirable quality if it is to be paralleled to having human ability—it is not able to create based on the abstract; it creates based on the given (Cohen, 1999).

Cohen (1999) noted that “a program can’t do what the human...does, and the human ... can’t do what the program does.... But even though they are doing [an act] in an entirely different way, they are, in fact, doing the same thing—that is, controlling the ... structure of the image” (p. 11). He went on to note that the creation of errors within the act did not allow the technology to redefine or re-enact since the program set up did not account for self-modification. Those characters are inherent in man’s very essence.

The art educator must make the students aware that technology aids them inquire, make notes of their thoughts and use available software programs, but it does not allow them to free themselves from the boundaries of captivity within their own thoughts.

Holzberg (2002) in her article, *Artful Technology: Put Creativity Boosting Tech Tools At Your Students’ Fingertips*, noted that it was very important to engage students in the use of technology at various levels since it made them aware of the role it played in preserving the nature of the Arts. Accordingly, “software, combined with digital cameras, scanners and mini-synthesizers, can help students master visual and performing arts skills while making it easier for them to express themselves, be more productive and to better manage their creative ideas” (p. 72).

Students create artwork, and then they preserve it by scanning the work onto the computer to perfect the image via computer generated digital art aids. The technology

here acts as a preserver and constructor of art since it allowed to students to safely create, preserve, explore and construct ways to diversify the presentation of the original artwork within its preset software specification (Holzberg, 2002).

Such use of the computer has allowed the art educator to introduce reform into the teaching environments. The computer, here, is an invaluable tool that allows the students to become active learners in their mastery of material related to issues with in their curriculum (Sabieh, 2002b; 2000c). Individually and collaboratively, the students grow within their medium recognizing that the computer is their partner that allows them to explore and explain phenomena within the field of arts.

Moreover, the technology has the power to keep the students on task (Sabieh, 2000a; 1998). Used in music, art, and drama classes, students remain focused and interested in the learning activities (Holzberg, 2002).

Furthermore, the computer, through the use of the Internet, allows the students to form communities with other students. Individuals with similar interests connect and link and explore mediums together. They are able to explore sites, and exchange ideas, work and be critics across the boundaries. Becker (1999) noted, "while the computer monitor had become our context for research, design and even social exchange, the world around us is trivialized, and we cease to question. Perhaps the most corrupting aspect of a life almost exclusively in front of a screen is that each of us begins to think that the universe is exclusively in our service, wholly under our control (p. 17)." She continued to say, "we no longer do the 'legwork,' or use our senses fully, to explore the world"(p. 17).

This is what the art educator must not allow to happen.

The art educator must make the students aware of what role the technology should be given in their field. Bohm (1993) noted that technology has taken on an increasing role against the intention of the artist since it has offered options with the field. Accordingly, Bohm emphasized "the technological perception is qualitatively poorer than human perception, but the latter yields nonetheless to the former, so that reproducers are now less qualified than their instruments" (p. 149). The outcome here is that the work produced by the artists has lost its artistic worth since the technology has redefined the subjectivity of the art work and transformed it into machine perfection.

The art educator is a responsible decision maker. He must provide the guidelines needed for the students to become masters within the field of specialization (Cooper, 1994). He is the central agent of reform. The educator must "understand the factors that contribute to a creative environment and implement them in [the] classrooms" (Peterson, 2001, p. 11).

With the technology being introduced into the World of Education, the perception of learning in art education has brought with it a different type of pressure. Learning, according to Pylv (2002), is not about being strong or brave in the face of adversity; it is about creating

An art educator must create for himself an understanding about the World and the ability to develop and adapt in it as his role continuously changes, making him more of a guide to enhance creativity than a method innovator. In implementation reform, the educator must become conscious of new approaches to teaching and learning. (Co-net to learning, 2002). The art educator must consider the learning/teaching paradigm and must

decide on what factors need to be redefined and worked upon to ensure creating for the students a collaborative cooperative learning/teaching environment. The second step in the reform must focus on the integration of the appropriate technology to ensure the role of education remains central on that. The third phase of their implementation, the final step of the project, has to do with the ability to sustain the school, class and student process, by assessing within the overall school setting the results of the learning and teaching in the practice. Along the way, the educator helps and guides the student in their project and communication skills.

The art educator must use the integration of the technology into the field to his advantage in his teaching endeavor. Quesada (1998) noted that having the students become active and responsible learners in creating plays, creating models, communicating visually, researching and composing provides the stimulation needed to encourage the growth of unique learning experiences within specific contexts. By using the technology in their activities, the students learn to become their own agents of action. The students research, plan, decide, and produce. They learn how to operate the technology hands on and then take off on their exploration ventures as their knowledge grows (Quesada 1998).

Burger (1992) noted that it was important that the creators focus on the creation and the producer focus on the use of the technology to produce or edit the creations. The art educator must point this out to the students to enable them to become aware of the multi-faceted roles the technology has to offer the field. "The multimedia is a black hole for the creative individuals. Because it is by definition a medium that requires the creator to be skillful in many disciplines, it reduces creative output to the lowest common denominator of creative talent" (Burger, 1992, p. 4). Armed with knowledge and awareness, the art students do not have to fall into the web of technology.

The material and the subject matter advanced by the art educator needs to be more flexible to enable students to make multiple choices in a time, a content, a context, and a process as they develop and encounter innovative ways to address their learning styles and needs to become active learners, creators and preservers of art.

Thus, in an era where technology has become the controlling factor, the educator becomes responsible in shaping the students to remain liberators of creative expression using the technology to help preserve the cultural identities of the time. It is in this way that I recommend technology to be classified as a friend to the Worlds of Art.

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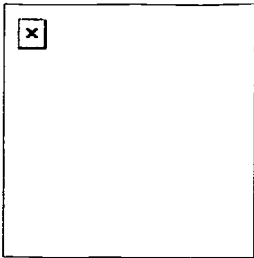
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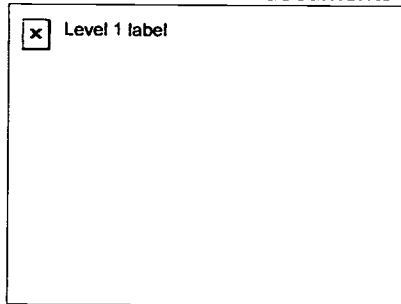
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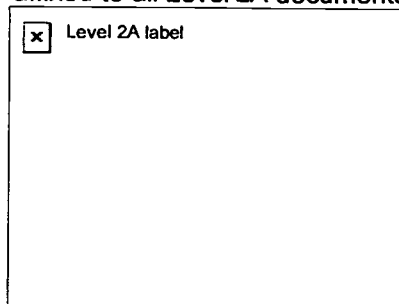


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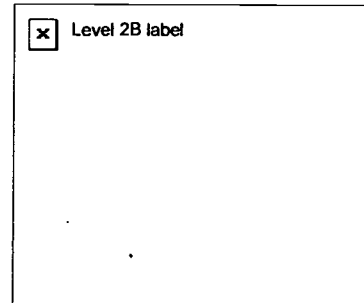


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