DATE: February 14, 2012

TO: Board of Trustees

FROM: Edgar Schmidt, Superintendent of Schools

SUBJECT: District Definition of Creativity (Trustee Request #136)

ORIGINATOR: Tanni Parker, Assistant Superintendent

RESOURCE

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REFERENCE: November 8, 2011 Board Meeting (Trustee Ripley)

October 13, 2009 Board Meeting (Trustee Request #226)

District K-12 Literacy for 21st Century Learners Guiding Document

Alberta Education Framework for Student Learning

Alberta Education Programs of Study

ISSUE

The following information was requested: Provide information on how the District defines creativity and how it is developing and supporting creativity and innovation in all of our students. Include examples of current classroom/school practice, initiatives and school programs. Also comment on the context in which this work takes place, the barriers and supports and district plans to enhance the development of student creativity in the future.

BACKGROUND

The District does not have a common definition for creativity, nor one standard way to develop and support creativity. However, the District is guided by Alberta Education's principles related to creativity as well as Alberta Education Programs of Study. The Alberta Education document entitled *Framework for Student Learning*, identifies creativity and innovation as one of the seven competencies required for Alberta students to become engaged thinkers and ethical citizens with an entrepreneurial spirit. It states that Alberta students are creative when they do the following:

- Use different ways of communicating in different situations.
- Can come up with original work and ideas.
- Appreciate the creativity of others.
- Are optimistic, curious and open to new and diverse ideas.
- Demonstrate initiative, imagination, spontaneity and ingenuity in a range of creative processes.
- Recognize and accept mistakes as part of the creative process, and as an opportunity to learn
- Demonstrate flexibility and adaptability in response to change; willing to take risks.
- Are able to demonstrate initiative, resiliency and perseverance when faced with obstacles and challenges.

Creativity can also be described by what it looks like when students exhibit creative thinking and identify how staff provide opportunities for creative skills to develop and flourish. (Attachment I)

CURRENT SITUATION

One of the primary vehicles through which district students develop creativity is in completing the expectations of the Alberta Education Programs of Study. Each program has identified creativity in the program's rationale, as well as through many of the general or specific outcomes. Attachment I provides excerpts from each of the core program's philosophy and rationale, as well as four illustrative (not exhaustive) examples of how creativity is infused into learner outcomes.

District staff work to provide rich and varied contexts so that students can acquire, develop and apply a broad range of knowledge, understanding and skills that enable them to think creatively and critically. Teachers provide space, and structure opportunities for the creative process to occur using strategies such as generating ideas through brainstorming and peer collaboration. Attachment II provides numerous (not exhaustive) examples of current classroom and school strategies to promote creativity.

District schools implement various approaches to develop and support creativity, in both regular and alternative programs. For example, within the regular programming offered at George P. Nicholson School, staff promotes creativity by *inspiring a world of wonder*. Attachment III provides many other examples of how regular and alternative programs support creativity.

At the district level there are multiple and varied supports provided to promote creativity and innovation. Attachment IV lists several other examples of district coordinated supports for creativity. Each of these activities provides students with an opportunity to share their creative work with a wider audience.

Some examples of district plans to enhance creativity and innovation in the future include:

- The continuation of supports shared in Attachment IV.
- The implementation of the recently approved Dance award for 2012-13.
- A focus on authentic learning as outlined in the K-12 Literacy Guiding Document for 21st Century Learners: teachers design authentic learning tasks and facilitate flexible, innovative and personalized approaches to learning by creating environments that engage all students in authentic, relevant and meaningful learning contexts. This year webcasts, teacher stories, resource packages, etc. have been, and will continue to be developed and shared with district staff. Components of authentic tasks refer to choice, creating meaningful products, and problem solving that engages students in critical and creative thinking as they seek solutions to ill-defined problems.
- The provision of real world collaborative opportunities for students to apply creative thinking and innovation to authentic problems which can translate into active global citizenship.

For creativity to flourish, adequate time and space must be provided for innovative ideas to emerge. Teachers often feel pressured to cover all of the mandated curriculum, and thus find it challenging to provide the necessary time and space to facilitate learning experiences that lead

to innovative ideas and creative products. Teachers are also challenged in how effectively to assess creativity within the context and parameters of their specific program of studies.

KEY POINTS

- Creativity is infused across the curriculum, supported by specific teacher strategies, promoted through regular and alternative programming, as well as, district events and initiatives.
- Within the District, parents and students are offered choices as to how creativity and innovation will be supported and promoted to enhance learning.
- Alberta Education identifies creativity and innovation as one of the seven competencies
 required for Alberta students to become engaged thinkers and ethical citizens with an
 entrepreneurial spirit.

ATTACHMENTS & APPENDICES

ATTACHMENT I	How Creativity is Infused into Core Programs of Study
ATTACHMENT II	Strategies used to Promote Creativity and Innovation
ATTACHMENT III	Examples of Current School/Program Practices that Support Creativity
ATTACHMENT IV	District Supports that Promote Creativity and Innovation

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How Creativity is Infused into Core Programs of Study

"Creativity and Innovation is developed over time and through a set of related learner outcomes as outlined in the various programs of studies." *Alberta Education Framework For Student Learning*

One of the primary vehicles through which district students develop creativity and innovation is in completing the expectations of the Alberta Education's Programs of Study. The philosophy and rationale, as well as four examples of specific outcomes of each Program of Studies, are provided below.

Science

The science program of studies articulates that the process of inquiry and problem solving be used by teachers. "The purpose of the program is to encourage and stimulate children's learning by nurturing their sense of wonderment. Active inquiry and problem solving can be stimulated by providing an initial focus and challenge for learning, by engaging students in developing or adapting a plan of action and by involving students in evaluating results. When an unexpected observation is made or a procedure does not work, there is opportunity for new ideas to emerge and a new set of procedures to be followed. A supportive climate for trying new ideas can be critically important to the development of student confidence and competence in their investigative skills."

Examples of specific learner outcomes (K-12) that promote creativity and innovation are:

- Design and construct devices and vehicles that employ energy-storing or energyconsuming components that will cause motion; e.g. elastic bands, springs, gravity, wind, moving water.
- Given a design task and appropriate materials, invent and construct an electrical device that meets the task requirements. .
- Devise and use methods of testing the strength and flexibility of materials used in a structure.
- Design an investigation to determine the properties of ionic compounds (solubility, conductivity and melting point).

English Language Arts

The English Language Arts program articulates that the use of exploratory language enables students to share thoughts, ideas and experiences while expressing and acknowledging emotions and is an avenue for discovery, reflection and innovation. Exploratory language facilitates collaboration allowing for dynamic approaches, creativity and innovation. "The aim of English language arts is to enable each student to understand and appreciate language, and to use it confidently and competently in a variety of situations for communication, personal satisfaction and learning."

Students use language to examine and reflect on new experiences and knowledge in relation to their prior knowledge, experiences and beliefs. Creative thinking and learning through language occur as they reflect, speculate, create, analyze and synthesize. Language learning facilitates development of metacognitive awareness, enabling students to consider, control and adapt their own thinking and learning processes. All this frames the Alberta English Language Arts Program of Studies, which requires that students read, listen and view and respond to input in a variety of ways. Students are expected to demonstrate their competency to produce texts and to speak in a manner that demonstrates analysis and creativity of thought. These expectations are embedded in the language arts outcome statements.

Examples of learner outcomes (K-12) that promote creativity and innovation are:

- Students will listen, speak, read, write, view and represent to explore thoughts, ideas, feelings and experiences.
 - Discover and explore
 - Clarify and extend
- Students will listen, speak, read, write, view and represent to comprehend and respond personally and critically to oral, print and other media texts.
 - o Create original text
- Students will listen, speak, read, write, view and represent to enhance the clarity and artistry of communication.
 - o Enhance and improve
 - o Present and share
- Students will listen, speak, read, write, view and represent to respect, support and collaborate with others.
 - o Respect others and strengthen community
 - o Work within a group

Social Studies

The Social Studies Program of Studies addresses the core concepts of citizenship and responsibility. It is designed to promote metacognition through critical reflection, questioning, decision making and consideration of multiple perspectives of issues. Through this process, students will strive to understand and explain the world in the present and to determine what kind of world they want in the future. The skill outcomes are grouped into four categories, *Dimensions of Thinking* being one. Within Dimensions of Thinking, critical and creative thinking are identified as key components in social studies learning.

Critical thinking is a process of inquiry and analysis that may lead students to think creatively. Creative thinking occurs when students identify unique connections among ideas and suggest insightful approaches to social studies questions and issues. Through creative thinking, students generate an inventory of possibilities; anticipate outcomes; and combine logical, intuitive and divergent thought.

Examples of specific learner outcomes (K-12) that promote creativity and innovation are: *Students will* develop skills of critical thinking and creative thinking:

- generate original ideas and strategies in individual and group activities
- assemble seemingly unrelated information to support an idea or to explain an event

- determine relationships among multiple and varied sources of information
- evaluate personal assumptions and opinions to develop an expanded appreciation of a topic or an issue

Math

The Mathematics Program of Studies states that "The learning environment should value, respect and address all students' experiences and ways of thinking, so that students are comfortable taking intellectual risks, asking questions and posing conjectures." With its focus on problem solving, reasoning and connections, the Mathematics Program of Studies requires students to use prior learning in new ways and contexts. "Problem solving is a powerful teacher tool that fosters multiple, creative and innovative solutions." In the K-12 Mathematics Program of Studies, specific outcomes are often stated in formats that enable creative thinking and innovation in responses.

Examples of specific learner outcome statements that promote creativity and innovation include the phrases:

- demonstrate an understanding of
- represent and describe
- illustrate the meaning of
- relate ___ to ___

Physical Education

The Physical Education Program of Studies provides opportunities for all students to express their creative talents, ideas, and innovative skills through the development of physical life skills. The program provides an equitable opportunity for all students to realize the benefits of participation in physical activity. Strong evidence suggests that participation in physical activity, whether sport, fitness, play, or dance contributes to physical, mental, social, and creative well-being providing benefits to the individual and the whole community.

Examples of specific learner outcomes that promote creativity and innovation are:

- respond to a variety of stimuli to create locomotor sequences
- select and perform simple movement sequences by using elements of body and space awareness and relationships, alone and with others
- display a willingness to share ideas (participate in a dance created and planned by a group of students)
- demonstrate ways to improve and refine the functional and expressive qualities of movements that combine basic skills in a variety of gymnastic experiences

The Fine Arts

K-12 Art education is by nature inclusive – it is for everyone. The visual arts prepare students to read and make images that express and communicate. Art education is concerned with making meaning of visual material as well as allowing for personal expression of ideas and emotions. In art classes, students are exposed to traditional and contemporary art practices, media and techniques. Students are encouraged to work like artists permitting diversity in project output. The elementary art program of studies states: Opportunity should be provided for enabling the child to grow in independence, individuality, self-realization, self-awareness and creativity. The

junior high and high school programs of study state that: Art education deals with ways in which people express their feelings in visual forms. Persons involved in the visual arts reflect upon and externalize their personal feelings and intuitions or those of their fellow human beings.

Examples of specific learner outcomes (Grades 1-12) that promote creativity and innovation are:

- Students will create an original composition, object or space based on supplied motivation.
- Students will use expressiveness in their use of elements in the making of images.
- Students will explore a personal selection of expressions.
- Students will develop a portfolio of works that will represent their personal style.

Music Curriculum

The systematic development of musical skills, knowledge and perception is fundamental to the total development of the individual. Music education should begin at an early age and should continue to *encourage creative expression through performance, listening and composition*. As students become sensitive to the expressive elements of music, they develop insight into human feelings.

The sense of meaning in music can be developed by the student as:

- Performer Performance is an active process involving the development and application of musical skills, knowledge and perceptions.
- Listener, evaluator, consumer, historian These experiences develop an understanding of music and musicians of the past and present.
- Composer The organization of the elements of music into an intrinsically satisfying composition generates aesthetic creativity and perception.

Through the music program, students will develop:

- insights into music through meaningful musical activities
- self-expression and creativity
- to enable students to understand, evaluate and appreciate a variety of music.
- to provide experiences that will foster the development of self-expression, creativity and communication through music.

Senior High Instrumental

• To develop additional avenues of self-expression through interpretation, improvisation, arranging and composing.

Senior High Choral

• Develop self-expression, creativity and communication through music.

Drama Education

Drama is both an art form and a medium for learning and teaching. It can develop the whole person — emotionally, physically, intellectually, imaginatively, aesthetically, and socially — by giving form and meaning to experience through "acting out". It fosters positive group interaction as students learn to make accommodations in order to pursue shared goals.

The overall goal of drama is to foster a positive self-concept in students by encouraging them to explore life by the assumption of roles and by the acquisition of dramatic skills. *The imaginative exploration involves setting up a dramatic situation, "acting out" that situation, communicating within that situation and reflecting on the consequences.* It is this reflection that provides the knowledge for self-development.

As students progress through the dramatic forms of expression at the secondary level, greater emphasis is placed upon the development of the individual as a creator, performer, historian, critic and patron. Here, the self-development and socialization processes of the student are extended by developing an appreciation of theatre as a traditional art form.

Strategies: Promote Creativity and Innovation

District staff work to provide rich and varied contexts so that students can acquire, develop and apply a broad range of knowledge, understanding and skills that enable them to think creatively and critically. Some examples include (not exhaustive):

- generate ideas through brainstorming
- experiment with new ideas and give new ideas form
- use a wide range of teaching methods to appeal to a wide range of learner styles
- offer authentic learning tasks
- provide opportunities for students to collaborate and inspire one another to create new knowledge and ideas using strategies such as the inquiry process
- promote flexibility, adaptability and self-reflection in learning
- use technology so that students can be creative in how they understand and manage the information learned
- provide multiple ways for students to demonstrate their learning
- model creativity
- facilitate inter-disciplinary thinking
- build efficacy...students can create if they think they can
- pose great questions to stimulate thinking
- allow time and space for ideas to emerge
- provide an environment that allows for, and encourages sensible risk taking and multiple perspectives
- encourage perseverance

John Steer, *Creativity: Delusions, Realities, Opportunities and Challenges*, Journal of Art and Design Education (28) 2, 129, 130 (2009)

Government of Alberta, K-12 Arts Education Framework, DRAFT (June 2009)

Sir Ken Robinson, *OUT of OUR MINDS, Learning to be Creative*, Capstone Publishing Ltd. (2011)

Examples of Current School /Program Practices that Support Creativity

Creativity and Innovation are developed and supported through regular and alternative programming. Examples of various approaches are provided below:

Alternative Programs

- **Arts Core:** Arts Core provides arts –oriented programming that emphasizes the visual and performing arts of music, art, drama and dance. Students are involved as creators, performers, historians, critics and consumers. These programs enable students to enhance the depth and breadth of their expression and intuitive response to the fine arts.
 - o Afton Elementary School (K-6)
 - o Mount Royal/Virginia Park Elementary Schools (K-6)
 - o Dance Program At Vimy Ridge (in affiliation with Edmonton School of Ballet Society)
 - o Victoria School of Performing and Visual Arts (K-12)
- **Caraway:** provides mixed age programming that emphasizes parental involvement and a creative learning process.
- Child Study Centre: Child Study Centre Program is based on the project approach that encourages young children to explore their environment and express themselves through an in-depth study of a particular topic. Child Study Centre emphasizes inquiry learning and the integration of curriculum around project work; children learn from first-hand experience and represent their ideas in different ways.
- IB Primary Years (IBPY) and IB Middle Years (IBMYP): provides programming that emphasizes the development of the whole person, as well as the interrelatedness of knowledge and global awareness.
 - o **IB Primary years is** a program of inquiry designed around six transdisciplinary themes with multitudes of inquiry based activities used to integrate the curriculum.
 - o Creativity, Curiosity and Empathy are valued, encouraged, and supported
 - **Creativity**: being creative and imaginative in their thinking and in their approach to problems and dilemmas
 - **Curiosity**: being curious about the nature of learning and of the world, its people and cultures
 - **Empathy**: imaginatively projecting themselves into another's situation, in order to understand his/her thoughts, reasoning and emotions
- International Baccalaureate Middle Years Program curriculum aims to: develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. The program philosophy
 - o encourages a positive attitude to learning by challenging students to solve problems, show creativity and resourcefulness and participate actively in their communities

- International Baccalaureate Diploma Program: The IB Diploma program helps students to develop an inquiring mind, a sound base of knowledge, an understanding and appreciation for the international community, and an excellent work ethic. All IB students are required to complete a 75 hour Creativity, Action and Service component.
- **Nellie McClung:** provides junior high programming for girls emphasizing leadership, initiative, self reliance and independence. Teachers stimulate independent thought and creativity, particularly through the science program. One of the core standards of the NM program is 'Independence and Initiative', two indicators being confidence and creativity.
- Science Alternative Program: The Science alternative program at Elmwood School provides a rigorous, engaging program for students who are intensely curious, ask a lot of questions and are fascinated by the natural and technological world. Curriculum is enriched through in-depth investigation and learning of key scientific ideas, as well as focusing on how language is used in science. Where claims are unsupported by evidence, students are encouraged to modify their claims, thus exercising adaptability.
- Waldorf: Educational programming matches subject matter to the appropriate developmental stages of a child. It is based on the understanding that the key to developing critical thinking is an active and creative imagination. The development of the child's imagination, inspiration, and intuition are enhanced by integrating music, singing, painting, drawing, modeling, movement and handwork into the daily curriculum.

Regular Programs

- **George P Nicholson School**: with the support of community, students are prepared for the future by emphasizing student programming that develops inquiry skills. Teachers use best practices which include problem solving, questioning and assessment for learning to support students' growth as curious, reflective and critical thinkers.
- **Lillian Osborne High School:** is a vibrant, innovative and active community of learners. Teachers design learning opportunities and assessments that require students to apply concepts to real world situations. Students are challenged to think, consider multiple perspectives through research and collaboration, make reasoned judgments, and express their new understanding in creative and innovative ways.
- Technology without Borders Schools: Twelve schools in West Edmonton purposefully integrate a variety of technologies to ensure that their students have a variety of ways to learn and to express what they know. Providing students choice, as well as tools (laptops, netbooks, digital cameras, iPads, etc.) to facilitate learning, engages students and inspires creative and innovative thinking.

District Supports that Promote Creativity and Innovation

District Consultants facilitate various supports through the organization and communication of events and opportunities that promote creativity and innovation.

- **AISI Cycle 4** In the final year of cycle 4, there is a focus on using the inquiry process to engage all learners, and designing authentic learning tasks that require students to collaborate, consider multiple perspectives, think creatively to solve problems, and express new understandings in innovative ways.
- **K-12 Literacy Plan for 21**st **Century Learners** provides supports to achieve the following goals: each student will engage in high quality literacy learning experiences; and each teacher will design authentic learning tasks to ensure growth in literacy competencies. The K-12 Literacy for 21st Century Learners, Guiding Document emphasizes that "literacy learning involves effective use of....critical and creative thinking...". Page 3
- Math4All over the past three years, this initiative has provided teachers with
 professional learning sessions and coaching support in regards to teaching with the intent
 and philosophy of the revised mathematics program of studies. High-impact teaching
 practices and numeracy tasks which support and encourage student creativity have been
 shared.
- **ARTiculate** Travelling Sketch Books for art teachers provide a unique learning opportunity for teachers to keep professional dialogue alive through the written conversation process.
- **DRAWn together** *again* Travelling Sketch books for students on the theme of identity.
- After School Art Program: The transition program at Balwin and McCauley has an Art Program as part of the after school program from Art Start (City of Edmonton). This program provided a creative outlet for immigrant and refugee students. Beginning in January 2012, on Saturdays, The Centre for Race and Culture is sponsoring a Dance and Drama from Around the World Program for students.
- Create in 8 –District wide collaborative art workshop for high school art students, focusing on team work and innovation.
- Collaborative Art, Music, Dance, and Drama Teams: groups of lead teachers meet regularly to share ideas and strategies.
- Locally Developed Courses: in Creative Writing; Dance; Theatre; Advanced Techniques in Art.
- **District Awards:** Drama, Art, Music, Dance and Writing (Margaret Stevenson).
- Student Art is showcased:
 - o Art at the Centre: K-12 student art showcased
 - o Shaw Conference Centre
 - o City Hall's Kids in the Hall Bistro
 - o Edmonton International Airport
- Tag Mag Showcases student creative work (written and visual)

- **FinAl** social networking site for art teachers and students from Edmonton and Finland. A partnership between established between Britt Petracek, teacher at Jasper Place and exchange schools in Finland.
- Cappies: The Cappies of Greater Edmonton is a unique learning experience for high school theatre students and for students with a passion for writing. The Cappies program provides advanced training for student writers. It offers constructive feedback for student theatrical endeavours, and fosters greater recognition of student achievement in theatre arts.
- **Night of Music:** EPSB's annual showcase of musical excellence involving choirs, bands, orchestra, and small ensembles.
- **Individual school** concerts, Jazz bands, assemblies, choirs, art showcases, fine arts nights, inter-school mural projects, community mural projects.
- Improv and One Act festivals: Improv festivals at the junior high and high school level provide opportunities for students to build their skills at improv (the ultimate in creativity) and compete with other schools. One Act festivals are a chance for students to direct their fellow students in a play. This occurs at a school level, city level, and provincial level.
- **Festivals:** Kiwanis Festivals, Alberta International Band Festival, Rocky Mountain Music Festival, Alberta Band Association Provincial Festival of Music; Choralfest; etc., provides opportunity for school music groups to perform and receive feedback.