Creative Teenage Students: What Are They Telling Us About Their Experiences in (and Around) Our High Schools?

This article highlights various approaches for accommodating and promoting creativity in high school students. Although in the past studies have addressed fostering creativity in our educational systems, few have sought the informative voice of the young creators themselves. The focus of the present study is primarily on environmental determinants of creativity as perceived by 13 (7 male, 6 female) creative seniors selected from a Canadian metropolitan high school. A qualitative study guided by an interactionist model of creative behavior (Woodman & Schoenfeldt, 1989), the present research design adheres most closely to the social constructionist interpretation and application of the grounded theory method as outlined by Charmaz (1990). Insights from 13 interviews and several field observations are divided into three sections. First, identified creative individuals are presented. Then emergent themes relevant to educational systems are examined, and finally, implications and suggestions are discussed.

We Poets in our youth begin in gladness;
But thereof comes in the end despondency and madness.
(Wordsworth, cited in Richards, 1994, p. 45)

Introduction

Anecdotal research by Polaine (1995) suggests that for some adolescents whose creativity has been crushed, the response is to humiliate and crush perceived creative growth in others. Yet even more tragic, other gifted teenagers manifest their frustrated creative talents in much more extreme fashion, with suicide or attempted suicide (Leroux, 1986; Willings & Arsenault, 1986). In less extreme cases, but no less alarming, is research suggesting that “as the world changes at a staggering pace ... students who fail to acquire a flexible and creative attitude
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towards life are at risk for obsolescence, not only in their knowledge, but also in their skills for coping with life” (Sternberg, 2000, p. 60). This viewpoint is reiterated in several recent government publications that state that “increasingly, success in the knowledge-based economy requires individuals who are creative and who have highly developed problem-solving and communication skills” (Human Resources Development Canada [HRDC], 2002, p. 30; Spooner, 2001). Ironically, institutions of considerable environmental influence such as schools are often cited as having a negative impact on creativity (Isaksen, 1987; Passow, 1977; Sternberg & Lubart, 1995; Torrance, 1977).

The time has come to view creativity as the current literature suggests, not as mysterious insight from the mind of genius, but rather as the product that arises from a considerable amount of social influence. These social influences include, for example, teachers (Torrance, 1981a, 1981b), mentors (Prentky, 1989; Simonton, 1978, 1984; Torrance, 1983; Zuckerman, 1979/1983), parents (Dacey, 1989a; Harrington, Block, & Block, 1987), peers (Polaine, 1995; Smith & Carlsson, 1985), and the sociopolitical context (Csikszentmihályi, 1990; Feldman, Csikszentmihályi, & Gardner, 1994). Once creativity is perhaps less romantically viewed in this fashion, the relationship between a student and his or her high school is transformed into one where considerable reciprocal responsibility emerges for the successful completion of creative endeavors (Montuori & Purser, 1995). As Feldman (1999) states, “the enduring belief that great creativity is developed alone, without assistance from teachers, mentors, peers and intimate groups is largely a myth” (p. 176). This is not to imply that the importance placed on individual motivation should be diminished, but rather it should be highlighted that teachers, schools, and other sources of preparation for later creative work are of critical significance and should not be taken for granted.

Moreover, when students are taught and their achievements are assessed in a manner that values their creative talents, their academic performance has been shown to improve (Sternberg, Ferrari, Clinkenbeard, & Grigorenko, 1996). In fact research suggests that “creativity may not only require motivation, but also generate it” (Sternberg & Lubart, 1999, p. 9). Perhaps even more promising, recent research indicates that if given an opportunity to be creative, students might not choose to become disengaged from school instruction; instead they may find their interest captured (Sternberg & Lubart, 1999). Yet sadly, in the past schools have not fared well in this regard (Isaksen, 1987; Passow, 1977; Sternberg & Lubart, 1995; Torrance, 1977).

Curiously, given the importance of creative skills to the future economic and emotional well-being of young adult students, little research has specifically sought to elicit their input and perspective regarding the conditions that foster and promote creative growth in high schools (Fishkin, Cramond, & Olszewski-Kubilius, 1999). To address this gap in the literature, the following questions helped guide the study.

**Guiding Questions**

1. Where do high school students perceive they are being asked to be creative?
2. In what areas has the school facilitated or discouraged high school students’ creativity?
3. What other perceived factors have positively or negatively affected high school students' creativity?

Method

Participants
The participants in this study were chosen purposely not for conventional generalizability, but rather for "an understanding of the conditions under which a particular finding appears and operates" (Huberman & Miles, 1998, p. 204). Participant selection was guided as a result of two phases.

In phase one, students enrolled in at least one Ontario Academic Credit (OAC) course (the senior year of high school in the Ontario academic stream) as well as each member of the teaching staff were given an opportunity to complete a questionnaire asking them to nominate fellow peers or students whom they believed to be particularly creative. From these nominations, an initial pool of 34 students, 19 female and 15 male, was generated. This list was produced by designating an aggregate score to each student nominee based on their obtained rank on both teacher and student nomination lists.

In order to avoid ambiguity, a standard for identifying creative behavior was employed. Both teachers and peers were asked to base their nominations on the following specific criteria: ideational fluency (lots of ideas); flexibility (many different ideas); originality (unique ideas); curiosity; problem-solving ability; and inventiveness (Hocevar, 1981). In addition, they were reminded that these qualities may be expressed in a variety of areas including fine arts, crafts, literature, music, performance arts, or math-science.

In phase two, the participants completed a slightly reformatted Creative Behavior Inventory (CBI, Hocevar, 1979), which is a 90-item inventory of creative activities and accomplishments. Based on this inventory, the pool was further narrowed by selecting 13 participants, six female and seven male, who had obtained the highest score.

Data Collection
The 13 seniors who participated in this study were asked to complete a short biographical questionnaire in addition to being individually interviewed. The interviews lasted between 25 and 80 minutes with an average time of 40 minutes and were, with prior explicit consent, audiotaped for transcription purposes. Mainly conversational in nature, the interviews gained minimal-to-moderate structure by the use of a question guide; however, participants were given considerable latitude to pursue a range of topics and shape much of the interview content (see Appendix for the interview protocol).

Data Analysis
Each of the 13 interviews was transcribed and analyzed following various grounded theory techniques outlined in Glaser and Strauss (1967), Glaser (1978, 1992, 1994, 1998), Strauss and Corbin (1990, 1998), and Charmaz (1983, 1990, 1995). Nevertheless, the present study adhered most closely to the social constructionist interpretation and application of the grounded theory method as outlined by Charmaz (1990). This method was chosen specifically to give voice to the students themselves; to allow the participants to shape the direction and nature of the research in order to gain a sense of what the participants'
own thoughts and perceptions were about the creative environments in and around their high school.

As suggested (Charmaz, 1990), coding proceeded in a two-step process with an initial coding phase followed by a second, focused coding phase. The collected data were examined in a line-by-line fashion for information that could be defined and discovered. For example, actions or events occurring or being represented were labeled. Proceeding in a line-by-line manner “keeps the researcher examining the collected data, rather than lapsing entirely into theoretical flights of fancy which have little connection to the data” (p. 1168). This process also helps dispel earlier preconceived assumptions and facilitates viewing the data analytically (Charmaz, 1983, 1990, 1995; Glaser, 1978).

In the second, focused coding phase, initial themes were weeded out, leaving a more limited set of developed categories. Categories are no longer simply labeled or summarized topics, but rather are analytically raised to a conceptual level and applied to large amounts of data. During this phase, continually comparing and questioning data with data, situation with situation, and concept with concept facilitated developing general categories, which were then broken down into their respective subcategories. Continual comparison of data is done in order to explicate and exhaust their various properties. It is important to keep in mind that in a social constructionist design, the researcher actively shapes the discovery process. Order is not discovered in the data, but rather is created by the researcher’s explication, organization, and presentation of it (Charmaz, 1990).

Results

Identification Technique

Employing a combination of methods for identifying creative individuals in a high school, for example, using both peer and teacher nominations as well as the ratings from the CBI, proved highly effective.

Five of the top 10 students nominated by their teachers were also among the top 10 students independently nominated by their peers. Furthermore, 12 of 13 students selected as a result of their obtained rating on the CBI were also nominated by both their teachers and their peers. In addition, eight of 13 participants had also won various awards in their previous year of school. These awards were as varied as the National Math League Award, 2nd place in an Ontario provincial physics contest (OAPT), Subject Awards in Music and French Immersion, Regional Finals at the Canadian Improv Games, and Honour Society Plaques and Certificates (see Profiles below for greater detail about each participant).

Participant Demographics

The 13 participants, six female and seven male, ranged in age from 17 to 19 years old. Six lived with one parent, seven with two. Their self-reported average grade throughout high school had a wide range from 60% to 92%, with a median of 80% and a mean of 79.5%.

Participant Profiles

The following 13 profiles provide a brief aperçu of the participants who took part in this study. They by no means do justice in capturing these outstanding, dynamic, and spirited young men and women, but do, however, permit one to
gain a cursory degree of familiarity with each. Information about handedness,
family structure, and birth order is given in order to highlight the fact that,
contrary to some creativity studies (Dacey, 1989b; Isaacs, 1984; Hetherington &
Parke, 1979, respectively) none of these characteristics appeared to be relevant
in the case of this research. Please note CBI scores were ranked by sex.

1. **Alex** is a 19-year-old right-handed woman who lives with her mother. She
has two notably younger sisters and one much older brother. Alex sees
herself as an only child when considering her family position. Alex ob­tained
the fourth (tied) highest score on the CBI (80) and her estimated
average grade throughout high school was 78%. Her main creative domains
are painting, sculpting, and sports.

2. **Ani** is an 18-year-old left-handed woman who lives with both her parents.
Ani has two younger brothers and sees herself as the firstborn. Ani's CBI
ranking was fifth (71). She has estimated her average grade to be 88% and
discussed painting, drawing, and art design as her main creative domains.

3. **Axel** is an 18-year-old right-handed man who lives with both his parents. He
has two younger brothers and sees himself as the firstborn. His estimated
average grade throughout high school is 74%. He obtained the fifth-highest
score on the CBI (81). Drama, comedy, being the school “ham,” and sports
rank as his main creative domains.

4. A 19-year-old right-handed man, **Borts** alternates each week between living
with his mother and his father. Having a twin brother, Borts sees himself as
a middle child. His CBI score of 44 ranked seventh. His estimated high
school average is 80%. He lists mathematics, physics, metaphysics, and
general problem-solving as his main creative domains.

5. **Dylan**, 18, is a right-handed man living with both his parents. He has two
younger brothers and considers himself the firstborn. His estimated
average grade throughout high school is 80%. Dylan ranked third on the
CBI (100) and cites physics, mathematics, metaphysics, and pottery as his
main creative domains.

6. **Geoffrey**, 19, is a right-handed man who lives with both his parents. Geoffrey
has one older sister and sees himself as the youngest in terms of family
position. His estimated average throughout high school is 90%. He obtained
a CBI score of (82) ranking him fourth among males. His main creative
domains are music and language arts (English class).

7. **Harvey**, a 19-year-old left-handed man, lives with his father. Although he
has two older brothers and one older sister, he sees himself as an only child.
His estimated average throughout high school is 60%. He ranked second on
the CBI (105). Drama, music, and language arts (writing lyrics) are the
domains Harvey identifies as his main creative areas.

8. A 17-year-old right-handed woman, **Janis** lives with her father and his wife.
She is the only child and perceives herself in this way. Her estimated
average throughout high school is 70%. Janis ranked first on the CBI (107)
and lists painting, sculpting, and music as her main creative domains.

9. **Marie**, 19, is a right-handed woman who lives with her mother. She has two
younger brothers and perceives herself as the firstborn. Her estimated high
school average is 87% and she obtained a ranking of third on the CBI (92).
Marie's main creative domains are music, student leadership, drama, and art.

10. Patrick is a 19-year-old right-handed man who lives with both his parents. Patrick has one younger sister and one younger brother and perceives himself as the firstborn. He ranked first with a CBI of (132). His estimated high school average is 75%. Music, drawing, and language arts (English class) are his main creative domains.

11. Shannon, 19, is a right-handed woman who lives with both her parents. She has one much older sister and two younger sisters, yet she sees herself as the firstborn. Shannon ranked fourth (tied) on the CBI (80) and estimates her high school average grade as 92%. Her main creative domains are language (poetry), puppet shows, and role-playing.

12. A right-handed 19-year-old man, Steve lives with both his parents. He has one younger and one older sister, as well as two younger brothers. Steve sees himself as a firstborn. His CBI score of (67) ranked sixth. Steve estimates his average high school grade as 85%, and his main creative domains are computer programming and sports.

13. Sylvie, 18, is a right-handed woman who lives with her mother. Sylvie has two much older sisters and one much older brother. She also has one younger sister and sees herself as a firstborn. Her CBI score ranked second (94), and she estimates her high school average grade to be 75%. Her main creative domains are music, dancing, language arts (lyrics), drawing, and painting.

Having had the pleasure of interviewing these creative young adults, I would like to share the following themes that relate to their high school experience in terms of their creative enterprises. Although other themes did emerge, for the sake of brevity and focus, only the themes related to their educational experiences are reported.

Emergent Themes

The emergent themes discussed in this article fall under two main divisions: (a) creativity in (and around) high school in general, and (b) creativity in the classroom.

Creativity in (and around) high school in general

Other people’s ideas: A catalyst. A large majority of participants (11/13) appear to get a spark from other people’s creative ideas. Using these ideas as a springboard for their own endeavors, they begin to incorporate and adapt them into new areas that meet their own particular needs.

Applying other people’s ideas as a starting point for one’s own creative endeavors appears to be a common, proactive practice among creative young adults. They are quick to add, however, that they are not copying someone else’s ideas, but rather adding them to an eclectic incorporation of adapted ideas transformed to best suit the situation at hand. Geoffrey explains, “I do take a lot of influences from other people. But I only take it in terms of like, as a starting point.” Steve elaborates,

I try to look at those [others’] abilities and say, “Well, look, this guy’s got a neat talent.” And then I try to like, feed off of the ideas of other people. Like, if I give you a specific example, the computer class, I go around and look at different
people’s programs. Not to go around and copy their ideas, but to go around and see what they’re doing, to spark some of the creativity that I have. And, in turn, I go around and help other people and show them the ideas I’ve come up with.

The use of another’s ideas as a catalyst to one’s own creativity is not restricted to any one subject area. Alex, an artist, affirms, “I can look at someone else’s [painting] and be like, ‘Wow! Their composition’s great!’ And then, see what ideas I can take from them but incorporate it into my own stuff.” Feed, spark, and fuel were some of the metaphors used to explain this inspirational springboard process.

Extracurricular activities. Overwhelmingly, the creative students in this study participate in, organize, and attend extracurricular activities associated with the school. School-initiated extracurricular activities are not only a high point for many of their creative endeavors, but they also allow students the opportunity to display their creative talents in ways not always permitted in regular school routines. They provide creative students with an arena for their offerings and help build a sense of connectedness to their peers and school that might not otherwise flourish. Such an opportunity is of particular importance to students like Axel, whose creative expression, largely as the class clown, is not typically encouraged by teachers or the regular school curriculum.

Axel discusses why he participates in numerous events, including the Fashion Show, Casino Night, and Coffee House, “just like, all the events are chances to be creative, that’s why I go to them…. This year was like super crazy, because I was trying to get involved in every single thing, and then there was my school work.”

For Marie the story is similar. She describes how extracurricular activities allow her to demonstrate her creativity, “I guess I’m pretty much obsessed with extracurricular activities. Like, I have to balance the rest of my life off of doing things like that. Because there isn’t, I don’t have a chance to be able to do that in school.”

Considering the many activities participants engaged in, creative young adults appear to be active harvesters of their own creativity by seeking outlets to cultivate their talents beyond what the normal school curriculum is seen as capable of providing. For example, in addition to these extracurricular activities, most participants (11/13) have sought more advanced training to hone their various skills by joining or enrolling in theater troops, a variety of art lessons, and music and singing lessons.

Sports. Another area related to the global school experience is creativity in sport. Sports as an avenue for expressing one’s creativity was reported by several participants (4/13), both male and female. It appears that sports help to focus as well as free one’s mind. Dylan states, “Sports sort of clears my mind of distractions.” For Axel, sports provide an arena for his creative expression, “Well, when I play hockey, I always do crazy moves. I do weird moves like make up new moves, like to deke people out.” Similarly, Alex states, “[referring to soccer] like the way I could see it, like going to get the ball would be like a completely different way for someone else. So I guess it gives you the upper hand. But also they’re thinking something different.” Participation in sports, provides an important, and often overlooked, avenue for students to develop.
and display their creative skills. For certain students, sports provided that vehicle.

_Time constraints._ Not surprisingly, not having enough time for both one's school work and one's creative pursuits is a genuine concern. Harvey provides a graphic example,

But, I don't do well in school because like, I do have a lot of extracurricular activities. Like my band. I practice with them Mondays, Wednesdays and Saturdays. I have play rehearsals Tuesdays, Thursdays and Sundays.... I'm really, really tired because of all these things I do.

For several participants (4/13) lack of time has resulted in incomplete homework. For others (5/13) it was not the school work that suffered but rather their creative pursuits. For example, Ani describes the effects of time constraints on her art,

Like I said before that, that having my feet in all these different areas is an asset. But it's, it's also a little bit of a hindrance. Because I spend time on all these other things, I don't, I find, I push my art aside a lot.

Lack of time resulting in creative or school corner-cutting is a difficult struggle for these active young students. It appears there is a pronounced tension produced by the tug-of-war between balancing creative endeavors and meeting school requirements.

_Creativity in the classroom_  
_Classroom curriculum._ Some degree of proficiency or talent combined with class settings and assignments that encourage (or at least permit), exploration, hands-on discovery, student control of their own acceleration, and a general outline containing clear criteria of basic expectations appeared to create an ideal learning environment for creativity to flourish. For example, Steve describes his creative experience in computer science class,

Well right now, it's making my own program, which is a real nice feeling. You're making your program and you can pretend, you can put a copyright on a diskette, and like, make believe. And you know, it's like, you designed it. No one's telling you [what to do], all you're told is what it's got to do, but the rest is up to you.

Sara, states that her creativity is hindered: "If there's only a certain way they [teachers] want things done. And so, basically any student can go and learn how they want things done and they can't be creative in how they do it." Geoffrey enjoys it when he is expected to be creative, "A lot of times it's good if you're expected to be doing something [creative]. Because, that way, like you feel you have to be sort of, you just do it."

Over half the participants cited their OAC Independent Study (OAC-IS) project as an assignment that pushed and fostered their creativity (this assignment is a major project that students undertake on their own on a topic of their choosing). Perhaps this occurs because the OAC-IS meets the conditions outlined above for assignments that are ideal for creativity to flourish. For example, the OAC-IS is an assignment that permits in-depth exploration, discovery, student control of their own acceleration, and a general framework containing clear evaluation criteria. Harvey states, "But if I could write some-
thing, if it could just be like, more independent study, like if the class were more like the Independent Study I think I'd learn a lot more.”

*Teachers.* Characteristics mentioned most often relating to a “good” teacher were teachers who provided encouragement and valued creativity, but also who taught techniques and allowed for experimentation. Patrick describes the best teacher he ever had: “She was very good because she just, she encouraged me ... and she just, she taught like, she taught you like styles and stuff, but she allowed you to experiment within those styles.” Ani, describing what a “good” teacher does, “Tell[s] me what’s going on and give[s] me feedback and also teach[es] me the techniques so that you have the knowledge ... [teachers need to] give you enough tools.”

In addition, creative students seem to respond best to teachers who display a true passion and enthusiasm for their chosen subject areas, are dedicated, and genuinely care for their students’ learning and well-being. Students spoke of teachers responding to their questions with suggestions for additional resources as they engaged in lengthy discussions after regular school hours.

“Bad” teachers were characterized as being rigid, defensive when questioned, and seemingly uncaring and unpassionate about their students and subject areas. For example, Borts describes a recent situation with one of his biology teachers,

> I’ll ask questions on biological models and her answers are always “It’s just a model.” She won’t say, “Well, I don’t know the answer” or, “Yeah, that’s a problem with the model.” She’ll just say, “It’s just a model.” As in, “It doesn’t have to make sense.” So, what’s the point of even taking that class?

It should be noted that creative students are quite demanding of their teachers, expecting much devotion, dedication, and enthusiasm; they often disengage when this is not the case.

**Discussion**

The participants of the present study were keen to suggest many ways in which the school system could facilitate their creative growth. First, in addition to sports, which may easily be overlooked as an outlet for creative expression, the importance of the various extracurricular activities that schools presently offer must be emphasized. Recall that extracurricular activities allow students the opportunity to display their creative talents in ways not always permitted in regular school routines. They provide students with an alternative arena for their creative offerings and help build a sense of connectedness to their peers and school that might not otherwise flourish and for this reason are of vital importance.

A second suggestion is for high school curricula to allow for a certain number of academic credits to be obtained outside the regular school experience in order to help alleviate some of the time pressures many of these creative students face, while still maximizing opportunities for specialized creative growth. For example, when students join community theater groups or seek other creative training opportunities, they could be permitted to receive course credit for these outside endeavors in a fashion resembling the popular co-op work experience programs that allow students to gain course credits after accumulating a certain amount of hours working in real workplace environ-
ments. This is congruent with creativity research by Renzulli (1992), which suggests students should be given realistic practical experiences with professionals in the field in order to more fully hone their creative skills.

Other suggestions volunteered by participants included having the school display more of the products resulting from their various creative endeavors. These creative projects could be displayed throughout the school, sending a clear message that creativity is an overt goal to strive for as well as a source of pride for creative individuals and school officials. Moreover, as this study has demonstrated, being exposed to the wide variety of creative undertakings of fellow students also plays a vital role in the creative development of other students by acting as idea springboards that help generate and spark their own creative processes.

Teachers and schools should continue to encourage exploration, hands-on discovery, and student control of their own acceleration, in addition to providing a general framework with clear criteria of basic expectations. Teachers, when asked supplementary questions could take the opportunity to suggest additional resources on topics of interest and convey a true passion for their respective subjects as well as for their students' interests and well-being. These findings are consistent with research by Renzulli (1992), who states:

Teachers who foster creativity tended to allow students greater choice in the selection of topics, welcomed unorthodox views, rewarded divergent thinking, expressed enthusiasm for teaching, [and] interacted with their students outside of class. (p. 178)

In addition, high school teachers could permit more choice in types of assignments, perhaps including more options that resemble the Independent Study. In recognition that students often differ in their preferred modes of expression, teachers could strive to present their lessons in ways that alter the delivery method.

Finally, that creativity may be expressed through sports, as this study suggests, is consistent with research by Kovac (1996), which demonstrates that creativity is a distinct feature of soccer talent. Therefore, it is important that future studies employing creative behavior inventories as a selection criterion for participants, as in the present study, consider adding questions regarding creativity in sport to the inventory items. This inclusion is required if we are to explore the creative student's high school experience more thoroughly. Studies should recognize the possibility that creativity may be expressed through a wide variety of forms; for example, one or several of Gardner's (1993) multiple intelligences.

**Conclusion**

The present study lends credence to the view that creative products arise as a result of a considerable amount of social influence. With this in mind, the relationship between a student and one's school and social community is transformed into one where considerable reciprocal responsibility emerges for the successful (or failed) completion of creative endeavors. If we are to acknowledge such a responsibility, then continued efforts to include the informative voice of creative young adults must be sustained.
Perhaps most important, one point that has become abundantly clear throughout this project is the profound importance and crucial role schools play in fostering and promoting young adults' creative expression. As educators, we must continually reexamine and restructure our curriculum designs in order to accommodate more fully the creative and potentially creative students who operate in our halls. Research that aims to inform our understanding of creative environments must continue, for ultimately, the promise of innovation and the answer to today's and tomorrow's problems rests squarely on the shoulders of these exceptional young adults.

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References


**Appendix**

**Interview Question Guide**

Name: ________________________________

1. What characteristics do you see in yourself that contribute to your creativity?
2. What have you accomplished that you consider creative?
3. Do you have a process you use (go through) when you create?
4. What environments encourage your creative behaviour? How?
5. What conditions have blocked, stifled, or inhibited your creative ability?
6. Who helped (encouraged) you to pursue your creative endeavours?
7. What environments have you sought out as an outlet for your creative behaviour?
8. How would you describe your parents’ discipline style? (possible probe: For example, what are some things you get in trouble for, and what typically happens after?)
9. What is the most important “thing” to your creativity?
10. How have your siblings or family position affected your creativity?
11. Is there anything else you would like to add?