Creative Identity Development in Classrooms

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Outside of the home environment, classrooms represent one of the most persistent and frequented settings where young people spend their time. Classrooms thereby hold much potential for creative identity development. Creative identity development refers here to the crystallization of creative interests ("I like writing short stories") and aspiration ("I want to be short story writer") into more stable beliefs about one's broader identity ("I am a creative short story writer") and sense of self (Beghetto, 2013; Beghetto & Dilley, 2016).

Given that some young people also go on to become teachers, classrooms also represent a site where adults can continue to develop and express their creativity in the domain of teaching (Beghetto, 2017). Although school and classroom settings hold much potential for creative identity development, this potential can sometimes go unrealized. Some commentators on creativity in classroom settings even go as far as to claim that schools and classroom may severely curtail or even kill creativity. How then might school and classroom experiences support students' and teachers' creative identity development?

The first step in answering this question is to recognize that although classrooms tend to share many features, there is a great deal of variation in the goals of any particular classroom. These goals play a non-trivial role in whether opportunities for creative identity development will be enhanced or suppressed. As has been discussed elsewhere (Beghetto, in press), the role creativity plays in any given classroom can be thought of as ranging on a continuum from contradicting and ancillary to complimenting or even superseding other goals. Classrooms that tend to view creativity as a contradictory or ancillary goal likely will provide few explicit or

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structured opportunities for creative identity development because creativity is viewed as being in competition with more pressing goals, namely academic learning. This is not to say that creative identity development cannot occur in such settings, but rather that the opportunities for doing so will be limited and even discouraged.

Conversely, classrooms that view creativity as a compatible or even primary goal likely will provide many more opportunities for students' creative identity development. Even with such opportunities there is no guarantee that a given classroom environment will support creative identity development. In fact, it is possible that such settings can somewhat paradoxically curtail creative identity development. Given that creative identity development in classrooms occurs within the context of academic learning, it is important that educators work to ensure that they are striking a productive balance between providing opportunities for students' original expression and meeting academic learning goals. Otherwise students may feel discouraged because although they are being encouraged to share their unique perspectives, they are not developing their understanding of the subject matter.

Consider for instance a teacher who encourages students to come up with their own way of solving math problems. Unless the teacher also makes sure that students are developing their understanding of mathematics and ability to arrive at mathematically accurate solutions, students' creative identity development may get stifled because they lack the confidence and mathematical understanding needed for creative expression in this subject area (e.g., "I can't be creative in math because I'm not good at math").

In short, there are various important factors that can influence whether schools and classrooms are supportive of students' creative identity development. The purpose of this chapter

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is to provide an overview of factors involved in creative identity development. The chapter is organized into two sections. The first section provides an overview of the nature of creative identity development and basic requirements for supporting this development in and across classroom settings. The second section provides an overview of unique features of specific settings from early childhood to higher education. The chapter closes with a brief discussion of directions for future research.

Creative Identity Development: A Brief Overview

As mentioned in the opening of this chapter, one way to think about creative identity development is to recognize that it starts with exploration and development of interests (Hidi & Renninger, 2006). As these interests become more developed and focused, they can become aspirations and eventually part of one's identity (Beghetto, 2013; Beghetto & Dilley, 2016). As an example, consider a young child who enjoys many different forms of creative expression (e.g., writing, gardening with a parent, dancing, baking cookies with a grandparent, singing, drawing, painting, building structures, and so on). Some of these interests will continue to deepen whereas others may drop-off or remain at somewhat of an exploratory phase. Overtime and with supportive feedback and continued engagement, particular interests can deepen and eventually become incorporated into one's creative identity.

In this way the young person's relationship with a creative endeavor can transform from an external object of activity to and integrated aspect of the self. The developmental trajectory of this aspect of creative identity development has been described elsewhere (Beghetto & Dilley, 2016) as building from enjoyment with the endeavor (e.g., "I like drawing") to aspirational goals (e.g., "I want to be an artist) and ultimately as a feature of one's identity (e.g., "I am an artist").

This trajectory can take many years and continue across the lifespan, including taking different trajectories as a person's goals and life circumstances change. In some cases, a person's developmental trajectory can be indefinitely suspended due to painful encounters with setbacks (e.g., denied admittance into art school).

There are numerous factors (e.g., environmental, physical, socio-psychological, situational) that can influence whether and how a person transitions from creative interests into creative aspirations and ultimately one's creative identity. Several of these factors will be highlighted in later sections of this chapter. Of these factors, a person's creative self-beliefs play a key role in the development of one's creative identity. Creative self-beliefs can be thought of as a constellation of beliefs that make up one's creative identity (Beghetto & Karwowski, 2017). Creativity researchers have increasingly recognized the importance of self-beliefs in creative performance and in the development of one's creative identity (see Karwowski & Kaufman, 2017).

Understanding the role that self-beliefs play in creative identity development is particularly important in the context of school and classroom environments. This is because self-beliefs are quite malleable and can be influenced by environmental and situational circumstances, which overtime can crystalize into one's creative identity. Creativity researchers have classified self-beliefs into the following interrelated categories (Karwowski, Lebuda, & Beghetto, 2019):

- **Creative confidence beliefs.** This set of beliefs pertains to people's confidence in their ability to produce creative ideas and actions. These beliefs range from dynamic, task and situationally influenced self-assessments (e.g., "I'm confident I can come up

with a creative solution to this particular problem") to more stable and general assessments (e.g., "I am confident about my ability to solve problems creatively").

- **Creative self-awareness beliefs**. This set of beliefs pertains to people's awareness of their own creative strengths and limitations as well as their ability to read a particular situation and determine whether it is worth the time, effort, and risk to put forth creative effort.

- **Creative self-image beliefs.** The third set of beliefs refers to people's own sense of creative-self (i.e., "I am a creative problem solver"; "I'm a creative home designer"). These beliefs, in part, take shape from the experiences people have and the confidence and creative self-awareness beliefs they have developed as a result of those experiences.

Taken together these self-beliefs help to shape one's creative identity. Recent theoretical and empirical work has demonstrated how these beliefs can help support the development from creative potential to creative activity and achievement (see Karwowski & Beghetto, 2018). In the context of the classroom, students have multiple opportunities to develop adaptive creative self-beliefs in and across numerous academic domains. The successes and setbacks that students experience in these performance domains can also help shape positive identity beliefs as long as students they have the opportunity to learn from those experiences, receive feedback that helps them recognize how they might continue to improve, and continually test out and re-calibrate their beliefs in light of their actual performance (Hollinger & Kaufman, 2018).

Creativity Identity Development in Classrooms

Prior to discussing the unique opportunities and constraints presented by creativity across different classroom levels (from early childhood to higher education), it is important to first outline some brief preconditions necessary for creativity in most any classroom setting. This starts with understanding that creativity is a retrospective judgement. Creative ideas, actions, or products are not known to be creative in advance of producing them. Rather, they are evaluated to be creative after they have produced or experienced and those evaluations occur in a socio-cultural and historical context (see Beghetto, 2017). The generally agreed upon criteria for making such evaluations is that they are both novel and meaningful to the task or situation at hand (Plucker, Beghetto, & Dow, 2004; Runco & Jaeger, 2012). Moreover these judgments are dynamic (Corazza, 2016) in that they can change across situations, time periods, and audiences. A student's idea that was dismissed by peers and teachers can later be recognized as quite creative. Similarly, a project judged in a middle school science fair as highly creative can be viewed as quite ordinary at the high school or college level. Moreover, a student's unique and personally meaningful experience of a lesson can still be considered creative at the subjective level even if it is not recognized as creative by others (Beghetto & Kaufman, 2007).

When considering creativity in and across the life span of classrooms, it is also important to understand the role that uncertainty plays in the development of creativity. Uncertainty is both a condition and catalyst for creativity (see Beghetto, 2019). When we encounter surprising situations in life where we do not know how to proceed or previous approaches no longer serve us, then it this is a sign that creative thought and action is needed. Indeed, creative thought and action is needed whenever we find ourselves at an impasse.

Uncertainty presents us with an opportunity to think and act in new ways. Of course, we can choose to ignore the uncertainty we face or attempt to force-fit prior ways of thinking and acting. However, if we are genuinely facing uncertainty, then the way to resolve will likely only occur from engaging with it in creative way. In the context of a classroom, educators typically work to reduce or eliminate uncertainty. Of course, not all uncertainty is the same. A classroom with no clear rules, criteria for success, or ways to get help when needed is a chaotic classroom. Chaos, particularly in a classroom setting, can serve as an obstacle to learning (Reeve, 2009) and the development of creativity of young people (Beghetto, 2018).

Most educators thereby focus on providing students with highly planned and structured academic learning experiences. Although this focus tends to increase with age, there are also early childhood environments that focus heavily on providing students with highly structured academic learning and preparatory experiences (Hirsh-Pasek, Hyson, & Rescorla, 1990). Just like too little structure can be problematic, too much structure can also be problematic when it comes to supporting creative identity development. If too much emphasis is placed on meeting predetermined academic expectations in predetermined ways, then students have few opportunities to develop their own creative ideas, insights and actions. This is not to say that academic learning and creativity are incompatible. Rather, if the goal is to support students' creative identity development then students also need opportunities to meet academic expectations in their own way. This involves allowing students to productively engage with and resolve uncertainty and an otherwise supportive learning environment (Beghetto, 2018). Suggestions for doing so at different classroom levels will be offered in later sections of this chapter.

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A related obstacle that tends to be more common in early childhood settings (but can occur at all levels) is the assumption that developing creativity in young people requires providing completely unguided and unstructured experiences, what might be called "free range classroom experiences". This assumption has its basis in various assertions, including the claim that young people (particularly young children) naturally possess high or even "genius" levels of creativity (e.g., Land & Jarman, 1993) and thereby educators simply need to get out of their way so kids can express their creativity.

Although there seems to be value in play and exploration, even in serious business settings (Schrage, 1999), it does not follow that educators should therefore limit their role in designing environments and experiences to support the creative development of young people (Zosh, Hirsh-Pasek, Golinkoff, & Dore, 2017). Rather, educators play a key and central role in the design and monitoring of experiences that will provide students with productive and supportive encounters with uncertainty. As has been mentioned, a completely unstructured learning experience can result in chaos and missed opportunities to provide experiences for students to develop their creative insights, and confidence in turning those insights into creative contributions.

In sum, it is more about providing opportunities for structured uncertainty, than providing completely unstructured and unguided learning experiences. Structured uncertainty refers to designing experiences, including academic learning experiences, that offer students an opportunity to productively respond to uncertainty by developing new and meaningful approaches to resolving complex challenges as well as identifying their own challenges to address (Beghetto, 2019). Striking the right balance likely will vary by context and even by

individual student and thereby requires that educators monitor students' experiences, provide timely supportive feedback, and make necessary adjustments along the way. The important point when it comes to supporting creativity development is that students have a blend of both planned and to-be-determined experiences.

A Theoretical Lens for Considering Creativity Development Across Classrooms

Given that creativity can manifest in different ways and at different levels across students' developmental trajectory across classrooms, it can be helpful to have a framework for thinking about the development and structure of creativity. Glăveanu and Kaufman (2019) developed a helpful matrix that can be adapted to classroom contexts to assist researchers and educators in considering core aspects of creativity development. Their matrix blends the Four-Cs of creativity (Kaufman & Beghetto, 2009) with Glăveanu's Five A's of creativity (Glăveanu, 2013).

Briefly, these Four C's of creativity represent different levels of creative magnitude and include:

- **Mini-c creativity** – refers to self-judged creativity, which often occurs during learning and includes new and meaningful ideas, insights, and interpretations of experiences;

- **Little-c creativity –** refers to everyday judgements of creativity by others, including teachers and peers recognizing new and meaningful ways students demonstrate their understanding;

- **Pro-c creativity –** involves professional levels of creative contributions recognized by relevant professionals, which includes teachers recognizing a colleague's creative approach to teaching; and

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- **Big-C creativity** – reserved for the highest levels of creative accomplishment that stand the test of time and typically judged by relevant experts in (and across) domains (e.g., Maria Montessori's method of teaching would be considered a Big-C creative contribution to education).

These Four-Cs or different levels of creative magnitude can be thought of as having five different structural aspects. Glăveanu has elsewhere presented these structural aspects as the Five A's (Glăveanu, 2013), which can be briefly described as:

- **Actor** – refers to the people who engage in creative endeavors and recognizes the socio-cultural context of those actors (e.g., students and teachers in a particular classroom and situated broader societal context);

- **Action** – refers to the coordinated socio-psychological and behavior creative actions people take (e.g., the various socio-psychological and behavioral factors of classroom contexts that impinge on creative action);

- **Artifact** – refers to what is produced and how it is evaluated in a particular socio-cultural context (e.g., what students and teachers produce will be evaluated in light of the various classroom socio-cultural and contextual factors);

- **Audience** – recognizes that creative expression is situated and interdependent with the social context of present and future audiences (e.g., students and teachers can serve as audiences for their own work as well as the work of others, see also Runco & Beghetto, 2019);

- **Affordance** – the particular material and socio-psychological features of the environment impinge on what is created, how it is created and how it is judged (e.g.,

students' and teachers' creative expression likely will vary depending on the

environment and materials used).

When combined together, the Four-Cs and Five As represents a matrix (Glăveanu &

Kaufman, 2019) that can be adapted for use by researchers and educators to think about the

different facets involved in understanding and studying the development of creativity across

different types of classroom settings (from early childhood to higher education). Table 1

provides a visual summary of how this matrix is applied to classroom contexts and highlights the

magnitude of creativity likely for each classroom level.

Table 1. **4C and 5A Matrix (Glăveanu & Kaufman, 2019) adapted for classroom contexts**

Classroom Level	Four Cs of Creativity				Five As
	mini-c	little-c	Pro-c	Big-C	
Early Childhood	*Likely*	*Possible*	*Pedagogical / Aspirational*	*Pedagogical*	Actor Audience Action Artifact Affordances
K12 classrooms	*Likely*	*Possible*	*Aspirational*	*Pedagogical*	
Higher Education	*Likely*	*Possible*	*Possible*	*Pedagogical*	

Note: *Likely* = occurs frequently; *Possible* = potentially occurs with opportunities, support and encouragement; *Aspirational* = rarely occurs, but can serve as an aspirational goal; Pedagogical = highly unlikely as this requires the passage of time and external expert judgments, but examples of Big-C can still serve as an instructional examples

As an example, mini-c creativity likely and frequently occurs at all classroom levels. Indeed, most classroom settings *afford* students, who serve as the primary *actor* and *audience* at the mini-c level, opportunities to learning new things, generate new insights, and ideas. These novel and personally meaningful ideas, insights, and interpretations that result from the *action* of learning serve as mini-c *artifacts* in the classroom. Further discussion of the kinds of insights that can be gained by applying this matrix in different levels of classrooms will be discussed in in the sections that follow.

Early Childhood Classrooms

The period of early childhood typically is conceptualized as ranging from birth to five. Preschool classroom education primarily focuses on children in the three- and four-year-old range[1] (although there are early childhood classroom settings that offer activities and experiences

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[1] The *Head Start* program, for instance, is a federal program, primary focuses on developing school readiness for children ages three to four, but also offers an *Early Head Start* program for infants, toddlers, and families in need.

for younger children). The early childhood classrooms and the activities in those classrooms tend to reflect the theoretical and philosophical orientation of the educators working in a particular context. As with any setting, the material, psychological, and philosophical features of the classroom can support or suppress opportunities for creative expression. Debates exist as to what early childhood environments should focus on and consequently there is a wide variation in how such environments are designed, enacted and experienced (Stipek & Byler, 2004).

One way this variation has been characterized is ranging on a continuum from more child-directed to more teacher-directed environments. Child-directed environments tend to encourage young children to explore their environments and interests with educators providing some level of guidance and structure in the design of activities (e.g., Duckworth, 2006). Teacher-directed environments tend to focus on having teachers provide more direct and structured learning experiences in accordance with pre-specified learning goals and outcomes (e.g., Adams & Engelmann, 1996). Even in settings that tend to espouse similar philosophical orientations (e.g., Constructivist, Montessori, Reggio Emilia, Waldorf, Direct Instruction), variations exist in the actual enactment and experiences of those settings (Lillard, 2012). Consequently, it is not sufficient to assume that what is espoused as a theoretical orientation or aim of a given early childhood setting (e.g., child centered), will actually be representative of how educators and young children experience or behave in such a setting. Indeed, it is possible that an environment that espouses a more teacher directed approach actually provides numerous opportunities for young people to develop and express their creativity in the learning activities designed by teachers. Similarly, it is also possible that an environment that espouses a commitment to cultivating children's creative development actually fails to provide the kinds of opportunities,

structure, and feedback necessary for students for creative development. With these caveats in mind, the next two sections highlight considerations and recommendations for supporting creative identity development in early childhood settings.

Supporting Creative Development in Early Childhood

Early childhood classrooms provide ample opportunities to support the development of young children's creative identity. Importantly, these opportunities tend to be focused on mini-c and little-c levels of creativity. Although claims are sometimes made that children already possess high (even genius) levels of creativity (Land & Jarman, 1993), it actually takes many years of developing deep domain knowledge for a person to have the competence and confidence necessary to produce highly accomplished levels of creative expression (Kaufman & Beghetto, 2009). Genius levels of creativity are extremely rare (Simonton, 2010) and are not a realistic aim of efforts to support creative development in the early childhood (or most any other) classroom.

Rather, a more promising goal in early childhood settings is to provide multiple opportunities for young children to explore and interpret their environment and develop meaningful *mini-c* insights as well as learn how to share and contribute those insights with others in the form of *little-c* contributions. Given that the creative *actor* in such classrooms are very young children, it is important to also help cultivate their awareness and confidence in their own ideas and actions. This can be facilitated by having the external *audience* (i.e., teachers, parents, peers) encourage and provide supportive feedback to young children when they express their own unique and personally meaningful ideas

The predominant creative *actions* in early childhood classrooms tend to focus on play and exploratory behaviors as well as introductory learning activities. Creativity researchers have

documented how pretend play can be beneficial not only for creativity development (Russ, 2014), but the health and well-being of children (Russ & Lee, 2019). Pretend play is a particular type of play activity, "during which children make up stories, use objects to represent other things (a block is a telescope), and express pretend emotions in the story narrative" (Russ & Lee, 2019, p. 19).

Although play and learning do not always result in material *artifacts*, children often produce symbolic creative artifacts through play (Glaveanu & Kaufman, 2019; Vygotsky, 2004) and occasionally produce temporary artifacts (e.g., a drawing, a structure made from bricks, a scene made of figurines, a sandcastle), which creativity researchers can observe and study. Moreover, the early childhood classroom tends to offer a variety of materials both physical and increasingly digital that provide various *affordances* for creative expression.

Implications for Practice

Caution should be taken when it comes to offering implications for practice in classrooms, because our understanding of creative identity development across the lifespan in classrooms is an emerging area of inquiry. That said, prior theory and research has pointed to practical implications that educators and researchers can empirically examine and test in an effort to further refine and deepen our understanding of creativity in and across classroom settings. The following are implications for early childhood settings.

- **Provide opportunities for structured exploration of uncertainty.** As previously asserted, creative expression requires structured opportunities for young people to engage with uncertainty. In the context of the early childhood classroom, this can come in the form of what has been called "guided play" (Russ & Lee, 2019; Zosh et

al., 2017). Guided play refers to providing structure to play, while still allowing for students to use their creative imagination to develop their own content, direction, and experience of the play activity. Guiding young children in developing playful and creative stories (Russ & Lee, 2019) is an example of structured play. Educators can, for instance, provide prompts to help provide a structure to the story, such as helping young people establish a beginning, middle, and end to their stories as well as include themes that encourage young people to play out their emotions through their characters. These kinds of pretend play experiences can also be extended to small group play sessions, which has been found to be beneficial in the development of this form of creative expression (Hoffmann & Russ, 2016).

- **Encourage students to communicate and recognize their unique perspectives.**
Early childhood settings tend to be focused more on exploration of topics, ideas, and experiences. Consequently, creativity development in the early years likely will benefit from providing opportunities for young children to construct and test-out their own unique and personally meaningful connections to the world around them (Piaget, 1976). The audience of this activity tends to be children themselves as well as peers, teachers, and parents. Part of creativity development in early childhood classrooms can thereby be thought of as helping young children become aware of their own unique ideas and learn to communicate those ideas to others. Given that early childhood environments tend to provide some level of engagement with introductory academic learning activities, it is important to also provide opportunities for students to express themselves within the constraints of academic subject matter learning. Doing so has

the doubly mutual benefit of helping young people start developing their creative identity and potentially contributing little-c insights to the learning and experiences of others (Beghetto, 2016).

- **Provide opportunities for symbolic as well as material expression of creativity.** As discussed, much of the creative activity that occurs in early childhood classrooms occurs in play and other ephemeral activities**.** The artifacts of these kinds of creative activities tend to be more symbolic, rather than physically tangible (Glăveanu & Kaufman, 2019). Young children are also developing their competence in producing material representations of their insights and interpretations. Providing children with opportunities to express their creativity in both symbolic and materials ways may therefore be beneficial in helping them explore, express, and develop a variety different medium for developing and producing creative artifacts. Digital tools may also serve as beneficial medium of expression, using digital drawing tools as well as digital audio and video recording devices.

K12 Classrooms

A Brief Overview of K12 Classrooms

K12 classrooms tend to be focused on developing and deepening students' academic skills and learning of academic subject matter. The primary (grades K through 3) and intermediate grade levels (grades 4 through 6) focus on helping students *learn how to* read, write, compute, as well as develop the skills and identity necessary to become successful students. Middle (grades 6 through 8) and secondary (grades 9 through 12) grade levels reinforce, build

on, and attempt to deepen students' confidence, competence, and understanding of academic subject areas introduced in the primary and intermediate grade levels.

Given that schools and classrooms are not naturally occurring or intuitive environments (Jackson, 1990), students typically spend the early years of schooling learning the roles, routines, expectations, and procedures of how to be successful in formal educational settings. Indeed, K12 classroom settings have several features that make them unique as compared to other social settings (Beghetto, 2019, pp. 588 - 592), including,

- *Densely populated*. Relatively large groups of students occupying small spaces for long durations of time across many years of their lives;

- *Focused on sameness*. Same aged students grouped in the same classrooms studying the same topics, in the same way, at the same time;

- *Predetermined roles and goals.* The roles that teachers and students play in classroom settings tend to be well defined and somewhat fixed, including some stereotypical roles that teachers and students assume across a school year or career, (e.g., "mean teacher", "good student", "trouble maker");

- *Socially dynamic.* The simultaneity, multidimensionality, and unpredictability of specific interactions and events in classrooms makes for a socially dynamic environment that is frequently punctuated by unexpected moments;

- *Overtly evaluative*. Students and teachers in K12 schools are continuously evaluated in formal and informal ways (e.g., student exams, teacher performance evaluations, a student's idea being redirected, parents emailing to complain about too much or too little homework).

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Taken together these unique features of K12 classroom environments help shape the kinds of opportunities and constraints placed on development and expression of creativity in these settings. Considerations for supporting creativity in light of these unique features will be discussed in the section that follows.

Considerations for Supporting Creative Identity Development

Given that the primary goal of K12 classrooms is often focused on promoting academic learning, creative identity development in K12 settings likely will be enhanced in settings where creativity is viewed as complimenting academic learning rather than competing with it. If creative identity development is viewed as requiring its own, separate curricular (e.g., a specialized class) or extracurricular (e.g., an after-school program) footprint, then creativity development will be positioned as being in competition with more primary academic goals and resources. This is one reason why creative development efforts are sometimes viewed as untenable and not part of the everyday classroom experience (Bereczki & Kárpáti, 2018).

Conversely, when creativity is conceptualized as a complimentary aspect of academic learning, then the classroom offers more direct and frequent opportunities to support students' creative identity development. If, for instance, students are provided with opportunities to come up with their own ways of solving a math problem (in addition to a taught procedure), then such experiences can complement and deepen their mathematical learning and simultaneously support their identity as creative problem-solvers in mathematics. Scaling this up, students who have structured opportunities to identify their own problems to solve, devise their own ways of solving them, and produce their own solutions to problems, have the opportunity to put their academic learning to creative use and make contributions beyond the walls of the classroom

(Beghetto, 2018). In this way, students are given a chance to experience what it is like to be the primary agents or actors of creativity for teachers, peers, and external audiences (schools, communities, and beyond).

The artifacts of K12 work range from more symbolic artifacts (e.g., ideas and insights) to material contributions (e.g., ranging from assignments, projects, and products). The level of impact likely will be in the mini-c and little-c range, but with external community based projects and partnerships it is possible for artifacts to lead to Pro-c creative contributions. A community based project may, for instance, involve a full range of artifacts from ideas (e.g., how to discretely address social isolation during lunch with a social media app) that then crystalize into actions (e.g., students working with programmers to learn how to develop the app) and new products (e.g., an app that students can use on their devices).

K12 classrooms that view academics and creativity development as complementary goals provide multiple affordances for supporting students' creative identity development because the primary academic goals present potential openings for students to express themselves in and across various academic subject areas. Such affordances also serve as a constraint in that creative endeavors that are not clearly aligned with or embedded in academic goals may have limited opportunities.

Implications for Practice

- **Identify and monitor assumptions and perspectives about creativity.** As discussed, creative identity development most likely occurs in contexts where creativity is recognized as a complimentary rather than contradictory goal. It is therefore important for both researchers and educators to examine assumptions about creativity in relation

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to academic learning and help cultivate an understanding of when, where, and how creative expression can be meaningfully infused into the curriculum (Renzulli, 2017).

- **Provide openings in the planned curriculum.** Even with an awareness of how creativity can complement academic learning, creative identity development requires multiple opportunities for students to express themselves creatively in the planned curriculum, receive honest feedback on those experiences (Hollinger & Kaufman, 2018), and have opportunities to demonstrate and discuss how their ideas and actions make a contribution to their own learning and learning of others. Simply put, unless openings for creative expression and supportive feedback is provided in the planned curriculum, it is unlikely that students will be willing to take the risk of attempting to meet criteria in new and different ways.

- **Provide opportunities to push learning beyond the walls of the classroom.** In addition to providing opportunities in the everyday curriculum, it is also important for students to develop and implement creative initiatives that address problems they care about and implement solutions they have developed in collaboration with others. Such structured opportunities can help young people take action on their interests, recognize that their ideas have value, and that they are capable of being creative agents who can have a positive impact on their schools and communities (Beghetto, 2018).

- **Monitor intended and unintended outcomes of creative endeavors.** Given that there is always some level of uncertainty involved in creative initiatives, it is important for educators to monitor students' self-beliefs (Karwowski & Kaufman, 2017) to ensure that they are developing the confidence, awareness, and identity necessary for

taking adaptive risks, persist through setbacks, and learn from failures. When working on creative endeavors that can have an impact on others, it is also important for educators and young people monitor both the intended and unintended outcomes of their creative efforts. Doing so can help ensure that creative work doesn't become an unprincipled and groundless effort to self-promote or create for the sake of creating and rather help young people think more systematically about the intent and consequence of their efforts.

Higher Education Classrooms

Overview

As students move from K12 to higher education classrooms, the goals and focus of what is taught tends to become more specialized because students often declare a domain specific major (e.g., education, business, psychology), including sub-specialties within the major (e.g., elementary education, finance, social psychology). Narrowing of focus and depth in domains tends to increase for students who go on to obtain postgraduate degrees and specializations. This is not to say that students do not have opportunities to take courses from broader subject areas as general educational requirements, electives or even interdisciplinary majors. Rather, students tend to have fewer options for taking coursework outside their selected major as they are often required to take a pre-determined curriculum of increasingly specialized coursework as they progress through higher education.

Depending on the type of institution and the instructor, students' opportunities to identify and pursue their own creative ideas and interests within a given course and line of study can vary greatly. In some cases, students have opportunities as early as their first years of undergraduate

work to engage in structured, creative learning (e.g., developing their own research projects in an established lab, developing their own design projects or products, developing their own ideas into a business plan). In other cases, opportunities for student directed learning and creative projects are limited to capstone courses or postgraduate work. Given that most higher education settings provide students with direct and indirect access to experts in specific domains, students have ample opportunities to become familiar with, observe, and sometimes participate in Pro-c levels of creative research and work. In this way, higher education classrooms have the potential to serve as an important context for developing and expressing creativity, even if this potential is not always fully realized (Halpern, 2010).

Considerations for Supporting Creative Development in Higher Education

Given that the development of students' creative identity benefits from having opportunities to engage with and receive expert feedback on creative endeavors, higher education settings can serve as an important setting for supporting students' development from personal interests and aspirations into more accomplished creative performance and ultimately help shape their developing creative identity. Indeed, higher education settings tend to be populated with and have access to highly accomplished experts (e.g., practicing artists, active scientists) who have deep domain knowledge and often are active contributors to those domains.

Experiences in higher education, of course, do not guarantee opportunities for students to have the kinds of experiences that shape adaptive creative beliefs and creative identity development, but the potential is clearly present in these settings (Halpern, 2010; Plucker & Dow, 2010). Indeed, much depends on the affordances and constraints of a particular course and classroom. The classic social-psychological concept of person-environment fit (Edwards,

Caplan, & Van Harrison, 1998) plays an important role in conceptualizing whether and how higher education settings support creative identity development. Settings that do not align with students' creative goals and interests (and vice versa), can pose non-trivial stresses and strains that challenge the development of creative competence and, in turn, one's creative identity. Even in settings that seem to be a good fit, creative identity development likely will benefit from on-going opportunities to learn about and creatively engage with the domain and experts in that domain, receive on-going feedback and opportunities to apply that feedback, develop adaptive creative self-beliefs, and incorporate those experiences and beliefs into their personal identity.

Indeed, as young people transition from secondary education to higher education, they start to hone their creative goals and aspirations, while at the same time exploring new possibilities and identities (Halpern, 2010; Plucker & Dow, 2010). This period of later adolescence can serve as a pivotal moment in students' creative identity development. As discussed, when students move from interest in creative endeavors (e.g., I like writing poetry) to internalizing those endeavors as part of their personal identity (e.g., I want to be a poet, I am a poet) the kinds of experiences and feedback they receive play an increasingly important role. This is particularly the case with how students experience and conceptualize the setbacks they encounter when pursuing their goals and aspirations (Beghetto & Dilley, 2016). Consider, for instance, two college students who have aspirations to be published poets. The students submit several poems to their college poetry magazine. Both receive rejection letters. One student puts the poetry pen down and stops writing poetry, the other continues this creative pursuit. What might be the difference in this decision?

Although there may be may factors at play, prior theory and research exploring these different trajectories (see Beghetto, 2014; Beghetto & Dilley, 2015) suggests that much depends on how students experience and interpret setbacks in light of two key factors. The first factor pertains to one's emotional reaction and the second pertains to self-beliefs. With respect to emotion, if students experience the negative self-emotion of shame, then it may be too emotionally painful for students to continue pursuing their creative aspiration. One reason why this happens is because self-conscious emotions like shame are intensely experienced and internalized, resulting in an indictment of one's identity (Lewis & Sullivan, 2005; Tracy & Robins, 2006). Whereas more basic emotions like anger can be externalized and are less damaging to self-identity and subsequent performance.

The second factor pertains to whether people believe that their ability is fixed or can develop (Dweck, 2000). Students who believe that their ability is fixed are thereby unlikely to continue pursuing their aspiration, because they may believe that they have exhausted their potential. The combination of experiencing shame and believing that improvement is not possible, seems to result in a doubly stifling belief that pursuing the creative aspiration would be nothing more than a painful exercise in futility (Beghetto & Dilley, 2016). Consequently, educators play a key role in helping young people frame these setbacks as learning opportunities, which in some cases may involve helping young people recalibrate their aspirations. Specifically, when students experience setbacks it is important to monitor how they are experiencing and framing those setbacks (e.g., as learning opportunities or as evidence of incompetence). Educators can help young people realize that improvement can still be possible by providing honest and specific feedback on where and how they can improve (Beghetto &

Kaufman, 2007). Doing so can help ensure that students can continue to develop their competence, confidence, and creative identity, even if doing so may require making some alterations to their aspirations (e.g., Although I may not be the next Emily Dickenson, I can keep getting better at writing poetry and strive to become a poet who writes poems that people enjoy reading).

Implications for Research and Practice

- **Provide immediate and frequent opportunities for students to creatively engage with complex problems.** Real problems are complex because they are filled with uncertainty. The development of creative identity likely is facilitated by actual opportunities for students to productively engage with uncertainty in an effort to identify problems worth solving, develop new ways of addressing complex problems, and establish creative and sustainable solutions. Legacy Challenges represents a promising vehicle for college (and younger) students to productively engage with uncertainty in an otherwise supportive and structured learning environment challenges (Beghetto, 2018). Briefly, legacy challenges are based on four design questions that result in student designed and directed projects aimed at making a positive and lasting contribution: *What is the problem? Why does it matter? What are we going to do about it? And, What lasting contribution will we make?* The support and structure provided to students includes helping establish clear expectations as to how students can seek help and what kinds of constraints students are expected to work within (e.g., amount of time devoted to the project; specific concepts or subject matter that might

be included; expectations to pitch project ideas to external audiences; expectations to seek external funding, and so on).

- **Establish within and cross disciplinary possibilities.** As mentioned, students' experiences in higher education tend to be increasingly domain and subject-matter specific. Although such experiences enable students to develop the knowledge and expertise necessary for making creative contributions within particular domains, students can also benefit from cross-domain experiences. Specifically, cross-disciplinary partnerships are often necessary for tackling complex problems. Consequently, students creative identity development can be facilitated by providing them with opportunities to learn from expert models in specific domains (Root-Bernstein & Root-Bernstein, 2017) as well as engage in creative, interdisciplinary work (Plucker & Beghetto, 2004).

- **Provide opportunities for students to share, test out, and receive honest feedback on their work.** As has been discussed, across all levels of schooling feedback is critical to creative development (Hollinger & Kaufman, 2018). The movement from mini-c ideas to larger-c creative contributions results from having opportunities to share one's unique perspectives and receive the kind of feedback that highlights whether and how their ideas might be considered novel and meaningful in the context of particular situations and tasks (Beghetto & Kaufman, 2007). In some cases, students' will need to be encouraged to more clearly and meaningfully connect their unique ideas to the subject matter being taught and in other cases they may need to be challenged to increase the novelty of their ideas. In addition, given that creative work

inherently involves taking risks, students will need to be supported in continuing to develop and improve their work in light of sometimes painful setbacks. This can help ensure that they do not abandon their aspirations, but rather learn how to further develop and define their creative competence and ultimately their creative identity.

Concluding Thoughts and Future Directions

This chapter presented an overview of how classroom contexts differ across grade levels and general considerations and curricular recommendations for supporting positive creative identify development of students. As discussed, classroom environments serve as promising contexts for creative identity development, but there are challenges to fulfilling that promise. Understanding how classroom contexts vary across the learning and life trajectories of students is an important first step helping educators design settings that can realize the creative potential offered of classrooms settings from early childhood to higher education.

Although theory and research in the field of creativity studies do offer potentially actionable insights on how to support creative development in classrooms, much more systematic and detailed work is needed. In particular, theoretical models that specify different potential trajectories of creative identity in and outside of classrooms in conjunction with longitudinal studies that examine the role classroom experiences play in the lifespan trajectory of creative identity development will go a long way in clarifying the role classrooms play in a person's formation creative identity. Such work will require a non-trivial investment of time and effort to design studies that examine and explore factors that are conducive to creative identity development, but likely will be worth the effort by further clarifying how classroom

environments can be designed to simultaneously support students' academic and creative

confidence, competence, and identity across the lifespan.

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