

Teacher Attitudes on Creativity¹

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Abstract

Teacher attitudes affect student achievement, satisfaction, and self-worth. While accommodations and support networks have long been established for students with exceptional abilities (e.g. gifted-talented students and student athletes), creative students are largely ignored in curriculum and school support. Generally, teachers support creativity in principle, but creative students exhibit characteristics and behaviors largely deemed undesirable, although creative people and students can further studies regarding Csikszentmihalyi's concepts of flow. The basic question of concern is this: What are teacher attitudes towards creativity and creative students? This literature review attempts to understand teacher attitudes, feelings, perspectives, or emotions regarding creativity, with a call for further research and study.

Keywords: creativity, creative students, teacher attitudes, American education

Yaratıcılık Üzerine Öğretmen Tutumları

Özet

Öğretmen tutumları öğrenci başarısı, memnuniyeti ve özsaygısı üzerinde etkili olur. Olağanüstü yeteneklere sahip öğrenciler için (örneğin, üstün yetenekli öğrenciler ve öğrenci sporcuları) destek ağları uzun zamandır kurulmuş olsa da, yaratıcı öğrenciler müfredat ve okul desteğinde büyük ölçüde göz ardı edilmektedir. Genel olarak, öğretmenler ilke olarak yaratıcılığı desteklerler, ancak yaratıcı öğrenciler istenmeyen özellikler ve davranışlar sergilerler, ancak yaratıcı insanlar ve öğrenciler Csikszentmihalyi'nin akış kavramlarına ilişkin çalışmaları iletilebilirler. Endişe duyulan temel soru şudur: Öğretmenler yaratıcılık ve yaratıcı öğrenciler hakkında ne düşünüyorlar? Bu literatür taraması, yaratıcılık, yaratıcı öğrenciler, öğretmen tutumları ve Amerikan eğitimi konularında öğretmenlerin tutumlarını, duygularını, bakış açılarını veya duygularını anlamaya çalışır ve daha fazla araştırma ve çalışma yapılması çağrısında bulunur.

Anahtar Kelimeler: yaratıcılık, yaratıcı öğrenciler, öğretmen tutumları, Amerikan eğitimi

Introduction

Creativity is often a misunderstood and misinterpreted. Its lack of singular definition lends itself to associations of defiance and rebellion, creative students going against the grain of educational norms and stares in the face of academic achievement while treading its own path. While certain attributes are similar to gifted/talented students, who themselves are often put aside in favor of more athletic interpretations, creative students are difficult to identify because there are few agreed upon definitions of creativity. However, to add to the discussion, although evasive in nature, teacher attitudes toward creativity are a truly defining and crucial element in the success of creative students.

Statement of the Problem

Creativity is met with mixed reception among American secondary teachers and others around the world. However, studying teacher attitudes and their effect on the students they teach, all the while attempting a central definition or even common indicators of creative thinking and activity will open both eyes and doors to future support of creative students. Furthermore, creative students are crucial to the understanding of flow, a system of concepts proposed by Mihaly Csikszentmihalyi (1990), and the potential future impact of creative

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students, although unpredictable and hypothetical, cannot be understated. Simply stated, although the mental and emotional support of creative students, too often viewed as defiant and misunderstood, is crucial to their academic wellbeing, and the study of creativity offers much more long-term benefits—and teacher attitudes toward its many facets is directly correlated with successful implementation (Gardiner, 2017) and possibly, future innovation from successfully supported pupils.

This problem deserves further research in order to support students who have gone without support, mentoring and nurturing for far too long. In full recognition of teacher overload and the many responsibilities resting upon the shoulders of educators and the hope that creative support would not simply be another stressor, but rather an opportunity to deepen rapport and establish fulfilling relationships with an often-misunderstood demographic. Further study and research would deepen understanding of creativity but more importantly, provide more tangible indicators regarding creative students (rainforest minds, etc.) (Shaughnessy, et al., 2022) and how creative success is linked to teacher attitudes regarding it. While teacher attitudes affect nearly everything in the classroom, from curriculum and achievement to mental health and moral values, the implications of creativity being misunderstood or interpreted as defiance or rebellion are cause for concern. Teacher attitudes are worthy of attention, giving educators agency and autonomy to address change in the way they see fit in their respective classroom environments and atmospheres. Although the emphasis is upon the American secondary classroom, the lessons of foreign secondary classrooms are valuable in the literature.

Definitions

Creativity: Unclear definition; attempts to quantify and qualify it are as follows: “unintelligibility as its splendor,” (Boden, 2004) “[bringing] into being an idea or an object out of what appears to be nothing” (McIntyre, 2012) (cited in Gardiner [2017]), “an act, ideal, or product that changes an existing domain, or that transforms an existing domain into a new one” (Csikszentmihalyi, 1996), “full-blast living” (Csikszentmihalyi, 1990, 1996), higher level thinking in regard to Bloom’s taxonomy (Hogan, 2012) (cited in Gardiner [2017]). In summation, there is no agreed-upon definition of creativity.

Defiance: Interpretation of unorthodox or abnormal behaviors against common norms within the secondary classroom (both American and foreign), often punished or socially discouraged by persons in authority (i.e. teachers) or by peers or by school or district.

Attitudes: Emotions, feelings, points of view, perspectives, perceptions of individuals (i.e. secondary educators) that affect behavior which influences others (i.e. students).

Achievement: While traditionally defined as academic achievement in regard to standardized test scores, achievement has myriad definitions and interpretations. In regard to creative students, defined as creative focus coming to full fruition or personal fulfillment—not necessarily profitable success.

Creative students need support and agency just as much as gifted/talented students, although societal and social pressures often overlook them. Studying teacher attitudes will result in tangible indicators of creative students, opening eyes to their needs, further

understanding of Csikszentmihalyi's concept of flow, and respecting potential future contributions. A proposed study of any kind should attempt to raise awareness rather than implement newfound policies: a study of teacher attitudes will result in better strategies with which to build rapport with creative students. Untangling the vast array of complexities in the study of creative students and teacher reactions towards them, an understanding of the existing literature is necessary.

Review of Literature

The study of creativity in the secondary classroom is inextricably linked to the study of the environments and teacher attitudes that surround it. The link between teacher creativity and the support of creative students is under-researched and underappreciated, as the study of this has implications regarding cross-curricular implementations of creative activities and Csikszentmihalyi's (1990) concepts of flow and deserves further study. This review of literature, what little there is, is divided into three sections based on subject matter: Attitudes on Creativity in the Classroom, Scientific Creativity, and Creativity in English Classrooms.

Attitudes on Creativity in the Classroom

Kettler (2018) has examined or explored or investigated teachers' perceptions in classrooms in America. Teacher understanding about creativity may or may not be aligned with the empirical findings regarding creativity. Given characteristics of creativity, for instance, teachers may find it undesirable despite supporting it – due to lack of awareness or education. Gauging teacher experience and awareness of the characteristics of creativity is crucial to creating a conducive and supportive learning environment for creative students.

Three-hundred and seventy-one American teachers (142 elementary, 207 secondary, 22 both) from five school districts across two states, teaching a variety of subjects (language arts, math, social studies, science, and various combinations thereof) with various levels of experience (allotted in tiers: 0-3 to more than 10 years) and different ages (18-29 to older than 49 years old) were given the Teacher's Perceptions of Student Characteristics Survey, which is divided into four sections (demographic of self, self-assessed creativity, importance of creative education ranked, and creative behaviors rated by desirability).

The questions of variance regarding subject, age, age taught, and years of experience were considered, but found no considerable differences, but there was correlation between teacher self-assessment of creativity, higher importance of its education, and respective desirability in students: creative teachers were more enthusiastic regarding creative characteristics in students and viewed it as a priority in teaching.

Jin (2021) has researched Chinese teacher perceptions regarding creative pedagogy practices in "making" activities in particular. The concept of "making" has become more popular in Chinese education, allowing students to share ideas and innovations while increasing their technical and internet skills for the modern world, but the study of teacher perceptions thereof is lacking.

Using a non-randomized sample to collect data, a paper or email Likert scale-measured questionnaire which incorporated theories of planned behavior concepts, of personal

innovativeness and peer influence, among others regarding pedagogy, and behavioral intentions, etc.) This focused on respective perceptions and feelings regarding implementation creative “making” activities, of 68 elementary and secondary educators from Hangzhou, China (37 male, 31 female, ages 18 to 46), with experience in maker instruction (experience ranging from 2 years to 26).

Jin (2021) found a direct correlation between higher regard for creative pedagogy and willingness to implement “making” activities, influenced by colleague views and facilitating conditions, prompting encouragement to adopt the theory of planned behavior while acknowledging the limitations of solely Chinese teachers from a single geographical area comprising the study.

Creativity in the Science Classroom

Miyong and Kang (2009) have investigated the perceptions of creativity among South Korean and American secondary science teachers. The perception of creativity among science teachers is limited. Many mandates have been made to include creativity in teaching or curriculum, and even though studies have shown that creative activities enhance scientific understanding, their use is largely misunderstood, or teachers lack confidence to implement them.

Forty-four South Korean and 21 US secondary science teachers were surveyed in an open-ended and Likert-type questionnaire, which was conveyed in both Korean and English, and careful consideration was given to the language utilized by participants.

Creativity was overwhelmingly associated by participants in both countries with the word “novelty,” although “problem solving” was another major association – although no teacher was entirely consistent with the academically founded characteristics of creativity. Different nationalities lent themselves to varying judgements regarding judging creative works, with South Korean teachers focusing on ethics while Americans focused on environmental or emotional support. Overall, teachers are largely supportive of creativity and felt it should be taught in the classroom, even if their definitions of creativity were very narrow. Further studies should be done in order to discuss the lack of ethicality and account for the small sample size used in this study.

Lee and Park (2021) have analyzed South Korean teacher, parent, and student attitudes towards creativity in the science classroom. Behavioral perceptions regarding scientific creativity from a student’s surrounding social environment in parents, teachers, and peers is crucial to the development and future success creative scientists. Examining the perceptions regarding three categories (nature of creativity, characteristics of creative students, and conducive learning environments for creative students) was thought to potentially unlock the key to consistent support of scientifically creative students.

Three-hundred and fifteen participants in Cheongju, South Korea were divided into three groups: 145 gifted elementary and middle school gifted students selected by and personally tutored (100 hours across a year of tutoring) by students and faculty at Chungbuk National University, 112 parents of students, and 48 teachers. A questionnaire was

distributed, asking participants to identify behavioral characteristics of creative scientists (a list compiled from study of creative physicists), comprised of 8 categories and 30 statements.

Different aspects or categories of the research were emphasized by different surveyed groups, based on questionnaire results: parents emphasized learning, teachers emphasized critical thinking, and students emphasized making and experimenting. As creativity's loose definition lends itself to interpretations of defiance, Lee, et al. suggest careful guidance of teachers and parents, and further research to see change in student's paths. Limitations are acknowledged as a limited standard of well-known physicists (excluding other sciences and creativities) during growth periods, and further in-depth interviews would be helpful to more accurately assess perceptions.

Ndeke and her colleagues (2016) have researched Kenyan secondary biology teachers regarding scientific creativity. Scientific creativity is key to the future success of biology students, and it is unclear whether creativity can be learned, or is innate. Creating conducive and supportive environments toward scientifically creative students is key to scientific advancement instead of the reiteration of known phenomena and laws. Teacher perceptions regarding scientific creativity lead to constructive or destructive classroom practices – and awareness is needed.

Two-hundred and five professionally trained biology teachers in public secondary schools in Kericho (128 teachers) and Kajiado (77 teachers) counties, Kenya, were given the Biology Teachers' Questionnaire (BTQ), including seven open-ended items that addressed the teacher's experience and/or knowledge of scientific creativity or scientifically creative students, namely the characteristics of creative learners. Relationship between creativity and knowledge of subject matter was also considered in the BTQ.

Most teachers surveyed (82%) indicated creativity cannot occur without knowledge of biology. Some outlier reasoning included, but were not limited to: creativity is innate, creativity applies to arts, creativity is accomplished by following rules. While creativity is a concept most are aware of, scientific creativity remains an enigma for most teachers, and further research is encouraged to broaden its understanding – in hopes that teachers can condone and create conducive learning environments for its support.

Yuksekyalcin and his coworkers (2016) has studied Turkish math and science teachers' attitudes towards creative drama in the process of digital storytelling. Digital storytelling is a tool encouraged to enhance math and science curriculum. Digital stories are used as a tool to enhance more STEM-based curricula, and teacher perceptions regarding its implementation is crucial to its success. Digital stories (DS) are defined as brief multimedia presentations that utilize multiple levels of learning to assess content effectiveness. Furthermore, creative drama is an untrodden field of possibility in the DS process, making concrete what is abstract, and enhancing critical thinking.

Twenty-five secondary teachers and members of the Turkish TUBITAK Project 4005 (12 science [6 male, 6 female], 13 math [8 male, 5 female]) were trained in the DS and creative drama process for two weeks, then given an open-ended questionnaire (5 questions) and

unstructured face-to-face interviews were done with 4 teachers (2 math, 2 science), about the DS and creative drama processes.

Overall, teachers had a positive perception of both the DS and creative drama processes, as they believed had a positive effect on teachers and students alike. Math teachers broadly hoped to use creative drama to spark imagination, while science teachers broadly preferred improvisation. Although the perceptions were largely positive, some questioned the feasibility during the teaching of some content, lack of training and confidence, immeasurability of creative outcomes, and inadequate resources.

Creativity in the English Classroom

McCallum (2016) has researched English schoolteachers and students about their respective perceptions of creativity in the classroom. Creativity, inherent to the study of the English language, is crucial to student personal fulfillment and expression, as well as the advancement of language itself. Thus, policies surrounding the teaching of English in the United Kingdom have at least a small part in the productivity or stagnation of creativity – further emphasized by socioeconomic divisions.

Twelve secondary teachers of varying subjects, years of experience, and age in two United Kingdom schools (Bloomington High and Windhover Boys, whose student populations respectively included lower class students and more affluent upper class families) were subject to semi-structured interview about how they construct and condone creativity in their respective institutions and classrooms.

Although the limitations are acknowledged, that this study is part of larger and (at the time of its publishing) unknown research and thus the sample size is limited, creativity is approached similarly at both institutions and held in high regard and priority. However, the lower class Bloomington teachers expressed hesitations about implementing content supportive of creativity due to lack of confidence, resources, or time, due to more rigid state-mandated standards and exams, while the more affluent Windhover teachers were more willing and able to implement creative curriculum because of better certification opportunities, resources, freedom, and time.

Wilson and Myhill (2012) have studied the role of British teachers' personal epistemologies in the teaching of both linguistic and literary metalanguage when teaching poetry. Linguistic metalanguage, or grammar, has been discussed widely, but literary metalanguage (i.e. literary devices) has been woefully underemphasized and limited in most English-speaking countries but is crucial in the study and teaching of poetry. Similarly, teacher view of knowledge and the nature of the learner (personal epistemology) influence student outcomes, involving philosophical concepts such as dualistic and relativistic ways of thinking. How teachers view knowledge affects students in the teaching of poetry.

Part of a larger study, a single eighth grade class in 31 UK schools (744 students total) were observed three times (a total of 93 observations) during each unit of work, followed each time by teacher interviews about writing and pedagogical decisions. A random student from each class was also interviewed to gauge metalinguistic understanding and choices made in writing. The first interview focused on word association, the second interview was used to

gauge teacher beliefs of grammar, while the third interview focused on teacher views of grammar and metalanguage.

In general, many teachers are comfortable using literary metalanguage, and in many ways a broader range than what is mentioned is common in language arts teaching. However, because of the rigidity present in linguistic metalanguage, many teachers reject it for the negative effect it can have on student writing (i.e. "poetry should be freeing"). Wilson and Myhill conclude that teachers with different epistemologies will teach differently, influencing students differently, and the neglect of linguistic metalanguage should be concerning.

Langley (2018) has studied American student and teacher attitudes and feelings about the importance and implementation of creative activities in secondary choral ensembles. While traditionally limited to composition and improvisation, some experts suggest creativity in music can be expanded to performance, conducting, and interpretation. While undoubtedly single-minded in the performance of a single piece of music, Langley suggests that the individualized student meanings are as important, and a teacher's perceptions of creativity are instrumental in its construct, emphasizing the process instead of the product. The variables of teacher preparedness, social environment, and individual definitions of creativity were also considered.

Eleven schools from 3 districts were chosen in the Southeastern United States, with varying levels of urban, suburban, and rural settings. Eleven teachers, members of the National Association for Music Education, were selected, and helped select secondary (middle or high school) choir classes (comprised of at least 29 students, mixed sexes) for study. Three hundred and fourteen students were selected from 5 high schools and 6 middle schools, interviewed alongside the 11 teachers using the Measures of Creativity Perceptions Assessment (MCPA), asking about how choral activities could be creative, self-assessments on creativity, if creativity is important in music education, and if students are given input into musical decisions. Student focus groups also formed semi-structured interviews.

Middle school students reported having less input than high school, but both reported low levels of student-centered learning. Teachers similarly were less likely to take student input unless they included improvisation and composition lessons in their classes. Teacher attitudes regarding creativity was unpredictable and inconsistent, usually reflecting the attitudes of their personal undergraduate professors. Students likewise developed perceptions of creativity based on their teachers' attitudes towards it, as well as any former music experience, and often showed discrepancies between choral creativity and creativity outside the choir room. Some seemed to distinguish between big "C" creativity and small "c" creativity without realizing.

Gardiner (2017) has studied the effect of personal tutelage of Australian teacher to students regarding creative playwriting. He first recognizes the ambiguity inherent in the definition and interpretation of creativity in an educational setting, furthermore enhanced by various eras and voices who have contributed to its lack of study. He incorporates Csikszentmihalyi's landslide research on flow, channeling creativity through playwriting in public secondary schools.

Teacher-student pairs from around New South Wales, Australia, were studied, 5 teachers and 5 twelfth grade students (4 females, 1 male). Students self-identify as writers and teachers are interested in scriptwriting, but with various experience. Gardiner utilized interviews, student logbooks, observations of teaching and learning sessions, and workshops of student material. The interviews occurred twice, during and after the scriptwriting process, respectively, with questions guided by concepts of literacy, engagement, and autonomy. Teacher-student observations also occurred the same day as the first interview. The second interview dwelt in more fleshed-out realizations of the first, attempting to connect engagement, creativity, and knowledge.

First interviews revealed student experience shaped by each individual respective creative lens, but also teacher creativity as well. Data, primarily gathered by interview information, were analyzed through mind maps, annotations, and memos to ascertain common ideas or themes. Results found a diminished intrinsic motivation often in the middle of the process, the longevity of the creative student determined by skill level or experience, furthermore explained by Csikszentmihalyi's flow theory. The study also found that in some cases student creative longevity was paralleled by the assigned teacher's prior knowledge or emphasis on preparation.

Attitudes toward creativity, particularly each teacher's personal proclivities toward creativity, have effects on creative students – the most consistent finding in all studies reviewed herein. Whether in a science or English classroom, teachers' attitudes toward creativity are largely positive, but societal priorities, teacher lack of confidence and resources, misinformation and misconceptions, and misinterpretation as defiance or deviance prohibit its full understanding. While undoubtedly impossible to define, the call in each article is to educate and reform. Addressing a plethora of scientific and literary concepts as well as activities necessary for each subject as well as cross-curricular matter, creativity pervades all of education, and offers a unique outlook on traditional thought and an insight into Csikszentmihalyi's flow. A deeper more longitudinal study that attempts to ascertain accurate and unfiltered attitudes regarding creativity and creative students, needs to be conducted in the future.

Conclusion

This review attempted to illuminate the attitudes and perspectives of teachers regarding creativity. Long supported in theory but ignored due to the undesirability of creative students' characteristics and the obscurity of creativity's definition, this paper hopes to highlight the systemic isolation of creative students, especially in comparison to the academic and extracurricular support of other students with unique abilities (e.g. gifted/talented and athletic students). A multifaceted issue, with inextricable ties to multiple school subjects and its bare threads exposed in regard to class and gender, The author proposes future research to provide further depth, scaffolding upon the findings of Kettler and cohorts (2018). Exposing bias and the schism between the theory and reality of the experience of teaching creative students, supporting creativity and creative students not only unlocks the concept of flow, but may also provide a meaningful and satisfying school experience to an often neglected and typically marginalized student population that needs representation and support.

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Conflict of Interest

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