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ABSTRACT

If education is concerned with imagination, it is important to know how educators perceive the term. For this purpose, an attempt was made to categorize ways in which teachers conceptualize imagination. Responses were obtained in a survey from 120 teachers who were registered in a graduate course on creative thinking. Participants ranged in age from young adults to middle age and included both males and females who taught at all levels from elementary through college. They were given approximately ten minutes to write their definitions of imagination. A content analysis of their responses showed that, in varying proportions, they viewed imagination as: (1) a thought process (thinking/mental activity); (2) dreaming, fantasizing, mind-wandering, visualization; (3) the basis of creative thinking (uniqueness, fluency, flexibility, originality of ideas and products); (4) an ability; (5) beyond ordinary thinking (not limited by reality, personal inhibitions, or logic; a way of seeing ordinary things differently); (6) ideating; (7) an expression of individuality; and (8) a problem solving or inventing kind of process. (JD)

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Imagination: Teachers' Perceptions
Of What It Is!

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The concept of imagination has long fascinated writers, scientists, and lay people. Almost everyone seems to know what imagination is, yet there is no clear definition available that has gained general agreement. Today, problems concerning the nature of images are a subject of investigation in almost every area of inquiry from anthropology to pedagogy, from mathematics to political science. However, research on imagination has not necessarily clarified the meaning of the word "imagination". It is still a word which "we keep using without thinking very much about" (Sutherland, 1971, p. 1).

A variety of descriptive words and phrases have been used in defining imagination. Gerard (1957), for example, conceptualized imagination as "an action of the mind that produces a new idea or insight" (p. 116). Osborne (1957) considered it as "the ability to think creatively" (p. 20). Williams (1970) described it as a "power" to:

visualize and build images
dream about things that never happened
feel intuitively
reach beyond sensual or real boundaries (p. iii).

Warnock (1976) defined it as a "power in the human mind" but "which is at work in our everyday perception of the world, and is also at work about what is absent" (p. 196). Further, to Warnock, "it's impetus comes from emotion as much as from reason, from the heart as much as from the head" (p. 196). Sutherland (1971) considered what people might mean by imagination. He suggested that if different groups of people are asked what imagination is they are likely to give the following classifications:

- 1) the ability to "visualize" things or events or call up other sense impressions
- 2) the ability to invent new things
- 3) the ability to produce works of art
- 4) the ability to foresee future events and plan for them
- 5) the means by which one can escape from reality, enjoy emotional relief
- 6) the power to deal with things or situations not actually present
- 7) a much less common definition is "the experience of having an undirected sequence of images" (p. 8).

It is not clear, from Sutherland's writings, as to how he generated his classification scheme. It is possible he asked people informally what imagination is, and then classified the various responses into the seven categories. In any case, his classifications do not appear to have been derived from any systematic study. It is possible that different groups of people probably think quite differently about imagination. Studies of how different groups of people view imagination may be helpful in defining the term "imagination" in more operational terms than before, and consequently aiding researchers to study it more scientifically with a view to fostering it. The present study was a modest step in this direction.

In the present study, teachers in several sections of a course on creativity were asked to define "imagination". It was felt that teachers are a particularly relevant sample for such a study because it is their views that affect the lives of many young people. It is possible that teachers often rely on their own conception of imagination and the ideas handed from one generation to another without any definite steps in the direction of formalizing a method to develop this ability. If education is concerned with imagination, we need to know what it is we are fostering. Thus, it is important to consider what teachers mean by imagination.

Method

Subjects were 120 teachers registered in several sections of a graduate-level course entitled, "Creative Thinking: Gifted and Talented" during the academic years of 1978-1982. They ranged in age from young adults to middle age and included both men and women. Teachers came from all levels: elementary, junior high school, high school, and college; specialists such as music and art teachers, librarians, and some school administrators. Most subjects had never taken a course in developing creative abilities prior to the one in which they were enrolled and few were familiar with the subject.

About mid-way into the course, subjects were asked to define the word "imagination". They were given approximately ten minutes of class time to collect their thoughts and write their definitions. This activity preceded a class unit designed to help these teachers learn to develop this important ability in the students they teach.

Results and Discussion

Two graduate students were instructed to perform a content analysis of the responses by developing as many mutually exclusive categories as possible, and tabulating the frequency for each category. The number of categories identified by these students were 15 and three. As a result of these differences, the first author independently analyzed the responses and identified 30 categories. In the final step, the two authors jointly reviewed the categories identified by all three individuals to determine commonalities and differences and thereby developed the final list of categories.

The joint review revealed that the differences in the content analysis of the three people were not so much in the categories identified but rather in how specific they were in attending to detail in the responses. A careful re-examination and discussion of the responses by the two authors suggested eight main categories. Table 1 summarizes these categories and their frequencies.

Insert Table 1 About Here

Some subjects offered brief definitions including only one aspect of imagination, or offered only one descriptive word as if they were using a synonym. Other subjects included many descriptions using as many as eight concepts to describe and clarify them. A few subjects elaborated upon their definition by giving examples to illustrate it, or by offering instances of how they used imagination. Interestingly, all definitions emphasized the constructive uses of imagination rather than the destructive uses. This may be an indication of the kind of sample in that the subjects are teachers.

Fifty-one (43 percent) subjects viewed imagination as a type of ability. Subjects generally elaborated on the type of ability imagination may be. Their varied elaborations are reflected in the remaining categories in Table 1. Only one subject mentioned imagination as an inherited quality or characteristic. It would be of interest for further research to determine to what extent people see imagination as an inherited gift as opposed to an ability that can be learned or developed.

Forty (33 percent) subjects differentiated imagination from ordinary thinking. These subjects expressed the view that imagination is not limited by reality, logic and/or personal inhibitions, and hence different from ordinary thinking.

Fifty-eight (48 percent) subjects viewed imagination in terms of creative thinking and/or creative products. Subjects either defined imagination as somewhat synonymous with creativity or referred to separate characteristics of creativity such as fluency, flexibility, or originality. This view may have been influenced by the course in which the subjects were enrolled at the time of the survey, and/or a function of the teaching methods used in the course. However, this view is often accepted by psychologists and educators working in the area of creativity who see imagination as part of the creative process (Osborne, 1957; Torrance, 1962; Williams, 1970; Gowan, Khatena, Torrance, 1979). The following responses were typical of category 2.

Imagination involves a kind of mental creativity.
Imagination is the precursor of invention and of creativity because nothing exists in fact before it first exists as an idea.

Fifty-nine (49 percent) subjects mentioned a variety of processes to describe imagination: dreaming, fantasizing, mind-wandering, forming a mental picture, and visualizing. These responses seem to suggest imagination to be a kind of unrestricted mental behavior that makes it "fun" and "playful". Typical responses were as follows:

Imagination is the uninhibited wondering of thoughts. It allows dreams to come true, freedom of anxiety in a world of fantasy.
...letting the mind roam free...a person's fantasies, their own dream world--the mind just wondering.

- ...the ability to let your mind wander and think about anything at all.
- ...using your creative ability in a manner that draws past and present experiences in a situation in which the mind can wander and visit worlds that are not possible to visit physically.

Eighteen (15 percent) subjects conveyed a problem-solving or inventive nature of imagination in their definitions. These subjects either used the word "problem-solving" or described a problem-solving process. Examples of these responses include:

- ...the ability to use your mind to solve a problem.
- ...a process you use to solve problems, create ideas and function in everyday living.
- ...the unrestricted process of creating.
- ...an inventing type process of the mind.

Sixty-one (51 percent) subjects conveyed the idea of imagination as a mental activity, a thought process, or as simply "thinking". This category is listed separately because subjects did not necessarily view imagination as solving a problem but described it more in terms of the use of the mind in a kind of mental activity. Examples include:

- ...the mind that explores the fanciful, the nonexistent, the impossible. It allows us to create visions in our minds...
- ...a thought process by which we are able to put ourselves in different places, or times, or even change ourselves into another person...

Twenty-nine (24 percent) subjects listed some form of ideating in defining imagination. References to the word "idea" were also placed in this category.

Some of the more interesting responses characterizing imagination not included in the table because of the limited number of subjects who mentioned them are: 1) spontaneity, 2) an infinite realm--limitless, 3) intellectual game with no rules, 4) type of "flight"

in thinking--journey to the outer regions of the mind, and 5) synetics ("the joining together combining of different and apparently irrelevant elements", Gordon, 1961).

The responses obtained from the teachers in the present study suggest attributes of imagination not unlike those suggested by Gordon (1957), Osborne (1957), Williams (1970), and Sutherland (1971). It is obvious that many teachers consider it as an "ability" or a "power" to "create ideas, products or solve a problem" and that the possibilities for imagination are "limitless" covering both the "real" and the "unreal". There was no effort made in the present study to probe more deeply into the responses given by the teachers. A more elaborate study is needed to understand how teachers derived their responses. For example, what do teachers mean by the term "ability"? In other words, to what extent do teachers believe imagination to be an ability that can be developed/learned/encouraged or as something that one is born with? A number of teachers defined imagination in terms of creativity, but it is not clear if they viewed imagination as synonymous with creativity, part of creative ability, or separate from creative ability. Further, when imagination is defined in terms of processes, such as "dreaming", "fantasizing", "mind-wandering", it is not known if subjects believe these processes to occur unconsciously or consciously. Further research might also explore what method, if any, teachers use to stimulate imagination, or for that matter, do they view development of imagination as a worthy aim for the schools? Thus, the present study raises more questions than it answers, perhaps sparking additional investigations.

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Table 1

Categories as Identified by Content Analysis
in Defining Imagination

<u>Category</u>	<u>Frequency</u>
Imagination:	
1. is a thought process (thinking/mental activity)	61
2. processes include: dreaming, fantasizing, mind-wandering, visualization	59
3. is the basis of creative thinking (uniqueness, fluency, flexibility, originality of ideas and products)	58
4. is seen as an ability	51
5. goes beyond ordinary thinking (not limited by reality, personal inhibitions, or logic; sees ordinary things differently)	40
6. is ideating	29
7. is an expression of individuality	22
8. includes problem solving (inventing)	18

Imagination

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