

Chapter V

Creativity Assessment in Higher Education

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ABSTRACT

This chapter discusses creativity assessment as a means for evaluating skills required in higher education. Creativity is assessed in the context of the creative person, process, product and press or environment. Creativity is also measured differently in various domains, which we illustrate using divergent thinking tests. A historical view of creativity assessment is addressed with a substantive approach to understanding the construct of creativity, its measurement and evaluation, and the broader implications for use in higher education settings. The authors provide a comprehensive overview of the different ways creativity is assessed and hope to inform researchers concerned about finding ways to better individualize instruction and to evaluate the effectiveness of educational programs.

INTRODUCTION

Education requires creativity. Effective higher education, which aims to prepare students for the world of professional work or postgraduate education, emphasizes creativity in thinking and problem solving. Torrance (1988) stated that creativity is almost infinite. How do we assess a skill that approaches infinity? Psychologists and educators are in consensus that creativity requires novel and adaptive solutions to problems. We talk of creativity when a student designs an interdisciplinary major to address interests that cannot be addressed through existing curricula, when a student solves a problem that is different from those directly practiced in homework assignments, when a student comes up with an idea for a paper or a research project, and many other situations that are defining of higher education. It appears that aesthetic taste and a lack of conventionality are consistent characteristics of creativity in all domains. However, the creative person is always operating within a domain, discipline or craft.

Measuring creativity in higher education will be beneficial for several reasons. First, such assessments 'diagnose' the state of creativity in an educational context. That is, creativity assessment answers the question whether students who are future professionals show creativity in their work. Second, creativity assessment can help educators better understand who the students with potential for future professional creativity are. In this context, we are able to answer whether a person is likely to be a significant professional contributor to a domain of work. Third, creativity assessment can offer feedback to both students and faculty. Finally, creativity assessment can offer information about how changes can be made to the classroom environment to facilitate (and not impede) creativity.

Creativity requires both novelty (originality) and usefulness (adaptability). Sternberg (2000) proposed a challenging idea that creativity is a

decision. This idea implies that creative giftedness is not a fixed trait, but a decision-making skill that can be developed. Consequently, research in creativity may lead toward teaching creativity (Schneider, 1997).

Four basic themes can be discerned in creativity research literature. First, it has been suggested that creativity is present in every individual, that all people possess creativity and creative problem solving abilities to some extent (Runco, 1994; Weisberg, 1999). Second, while many people are creative to some extent, some people tend to be more creative than others (Gough, 1985; Sternberg, 2001). For example, personality attributes may explain how some individuals are more likely to exhibit creativity (Gough, 1985). Third, creativity can be studied as a manifestation of cognitive skills that are developed within a creativity-fostering environment. Fourth, fuller understanding of creativity requires an integration and combination of these themes (Sternberg & Lubart, 1999). The investment theory defines creativity as resulting from an interaction of six "resources": intellectual abilities, knowledge, styles of thinking, personality, motivation and environment.

In order to comprehensively assess creativity, several major areas of interest can be identified. These areas prominently include the creative process, creative person (or personality), and creative products. These are broad areas that can help organize creativity research and assessment and each area includes many different assessment approaches that have been extensively written about. Our goal in this chapter will be to offer an overview of creativity assessment for each of these three areas and describe in more detail one important assessment technique illustrating the creative process, person, or product.

Kaufman and Baer (2005) stated that creativity is likely domain specific. People are most likely to be creative in one domain and few people may be creative in two or more domains (Ivcevic &

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