

# 5. Achievements of Specialists:

## How do individuals who seek to be specialists in a domain learn what they need to know and do?

### Introduction

#### Who are specialists?

Specialists are people who have mastered the fundamental knowledge and skills in a field, discipline, craft, or profession. Other specialists in their field have accepted them as qualified practitioners. Examples of specialists include physicians, lawyers, certified teachers, professors, priests, nuns, shamen, pilots, licensed plumbers and electricians, board approved nurses, professional rodeo performers, members of the screen actors guild, professional truck drivers, police officers, certified public accountants, professional dancers, and many others.

At the specialist level of achievement, individuals often become experts within some specialized subpart of their larger field. For example a rodeo performer might be a specialist in barrel racing; a lawyer, in tax law; a nurse, in obstetrics; a trucker, in over-the-road hauling; or a dancer, in ballet or jazz dance. Feldman calls this level of achievement "idiosyncratic" because specialists have a specialty that they "choose to master in a particular [idiosyncratic] way" (Feldman. 1985, p. 10).

Specialists within a domain share many fundamental understandings and skills and evaluate the quality of work produced within their domain. Specialized communities within a domain define their discipline. Members of that community share a good deal of fundamental knowledge, skills, and standards of excellence.

According to Feldman "not very many individuals within a culture will necessarily (or should necessarily) achieve a given level of expertise within such domains. [Individuals wishing to attain specialist achievements "must begin at the beginning [level of a domain] and advance through the levels, progressing from novice ... to expert to master..." (Feldman. 1985, p. 10).

Specialists work their way through universal, cultural, and discipline-based levels of achievement, before becoming full-fledged specialists. For example the following are increasingly advanced levels of achievement attained by specialists in the language arts. People learn to make vocal utterances as a universal achievement. They learn to speak their native tongue as a cultural achievement. They master fundamental language knowledge and skills that are based in literature (or theater, or journalism, or other disciplines related to language arts) as discipline-based achievements. However, a discipline-based education is not in itself sufficient to gain membership in the discipline. They become specialists by reaching a higher level and being acknowledged by their peers, for example by writing novels, teaching literature, or reviewing books for a magazine or newspaper.

## **Achievements of Art Specialists**

### **How do people who seek to become art specialists learn what they need to know and do?**

As a university student you probably have a major, which is usually the domain in which you are training to be a specialist. Individuals who seek advanced understanding and skills in an area need the sort of specialized instruction and support provided at colleges and universities, professional schools, apprenticeships, etc. The means of developing specialized knowledge and skills and the means of learning to meet the criteria generally agreed upon by art specialists varies across cultures and eras. For example in China a thousand years ago the imperial court nurtured the development of artists. Today in China the Communist government oversees the education of artists; in the 18<sup>th</sup> century the French Academy set the standards and provided instruction for those it accepted in its ranks; traditionally, accomplished older Navajo women teach girls and younger women (often in the family or the clan) how to weave and meet accepted standards for technical quality and traditional design.

Art specialists are those individuals who have been judged to have met the standards to be achieved by experts within their own art tradition. Art historians, aestheticians, certified art teachers, exhibiting artists, and art museum curators are some of the art specialists in the mainstream contemporary United States artworld.

Typically college, university, and professional school art majors are required to take such discipline-based courses as two-dimensional design, three-dimensional design, color, drawing I, and drawing II, plus, usually, two survey art history courses that increasingly include some non-Western art along with European and American art. In higher education, art courses usually focus on just one discipline.

Upper division courses usually focus on specific areas within a single art discipline, for example, Northern Renaissance Art History for art history majors, Teaching Studio Art for art education majors, or Ceramic Glazes for studio art majors. As they proceed in their careers, many art specialists further their professional education through graduate studies by submitting their work to the judgment of peers in their discipline.

Increasingly states and school districts require or encourage art teachers to complete masters degrees. A few teachers submit extensive applications to be judged for National Board Certification in Art Education. Some art educators complete doctoral degrees and submit their research to peer review through professional art education organizations.

Practicing artists who teach in colleges and universities often complete the traditional highest (terminal) art making degree called the Masters of Fine Arts, which culminates in a major solo exhibition. Many practicing artists also submit their work for judgment by other members of the artworld by competing for participation in group and solo exhibitions, for grants, for fellowships, and for commissions. Artists who produce artwork judged to be exceptional are often acknowledged through awards, purchase prizes, and good reviews in artworld publications.

Art historians tend to hold positions in higher education or as curators in the museum and gallery world, virtually all of which require graduate degrees. The terminal degree for art historians is

the Ph.D., which culminates in a research dissertation. Members of the artworld judge the work of art historians largely through their publications and presentations, including juried and blind-reviewed research papers. Many art historians also compete for grants, fellowships, and awards in their field.

### **Plural Artworld Viewpoint**

Clover and Erickson (1997 and 1998) propose a sophisticated level of achievement in art understanding that they call the Plural Artworlds Viewpoint<sup>1</sup>. People using this viewpoint have knowledge and ability to apply ideas and norms used by art specialists in various cultures. Also these viewers consciously make choices among alternative viewpoints, selecting the most appropriate for the artwork they are seeking to understand.

According to Clover (1995) when viewing a traditional Navajo rug, older Navajo respondents used ideas and norms appropriate to the Navajo artworld. Those Navajo and Mexican American viewers who had extensive mainstream U.S. art education and who also maintained strong ties to their traditional culture were able to use traditional Navajo or Mexican American ideas and norms as well as ideas and norms from the Modernist artworld.

Clover and Erickson's Plural Artworld Viewpoint goes beyond cultural understanding. People using this viewpoint not only appreciate differences in cultural beliefs but also are familiar with the standards and norms that art specialists in another culture's artworld use to interpret and judge art made in that artworld. Additional research is necessary to refine and elaborate this viewpoint.

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<sup>1</sup> Clover and Erickson originally labeled this viewpoint “Alternative Artworlds.”

## **What do researchers say about the achievement of specialists?**

To meet the standards set within a discipline for becoming a specialist, more sustained and systematic effort is required than that required to attain discipline-based achievements. In many cases post-secondary education (college, university, professional school, apprenticeship, and/or internship) is necessary to learn what is required to become a specialist, that is, to become a qualified practicing member of a discipline.

H. S. Rosenberg (1987-88) interviewed visual artists about their art-making processes and found they used internal processes, external processes and used processes that connected the internal and the external. "The internal aspects include rich storehouses of multi-sensory images, fluent, vivid, controllable, and flexible images; and a variety of imagery manipulations and strategies.... The externals are the elements of form, the principles of art-making, and the manipulation of the craft materials" (p, 80).

According to C. M. Zeitz and R. Glaser (1996) specialists or experts share certain characteristics.

- They have exceptional memories within their domain.
- They recognize meaningful patterns, often very quickly.
- They usually have devoted at least 10 years to accumulating knowledge in their domain.
- They represent problems differently (more deeply) from novices.
- They spend more time encoding problems than novices.
- They "carry out procedures quickly without draining attention resources.... [In part because] some component skills become automatic" (Zeitz & Glaser, 1996, p. 507).
- They "develop a critical set of self-regulatory or metacognitive skills, which controls their performance" (Zeitz & Glaser, 1996, p. 507).

Zeitz and Glaser also report on those particular specialists or experts who work in what they call "ill-structured domains"-- domains, such as the humanities and social sciences, that do not have "quantitative, well-defined rules and clear methods for assessing progress as well as criticism for good or bad solutions" (Zeitz & Glaser, 1996, p. 507).

- Specialists in ill-structured domains "appear to impose constraints on problems in order to make them tractable, and then expend extra effort in defending their approaches, because objective methods of evaluation are unavailable. In addition, [they] excel at building higher-level representations through the detection of relationships and integration of ideas" (Zeitz & Glaser, 1996, p. 507).
- Specialists in ill-structured domains argue well. "Argumentation skills are an indispensable component of expertise in domains where there are few generally agreed-upon solutions and no algorithmic proof methods" (Zeitz & Glaser, 1996, p. 508).
- "Unlike novices, who merely offer simple individual assertions to support their claims directly, experts ... build complex arguments, presenting ideas that work together to support more general ideas, which are then often used to support their opinions" (Zeitz & Glaser, 1996, p. 508).

W. Perry's (1981) Relativist Stage of cognitive and ethical growth, D. Kuhn's Evaluative Level of epistemological understanding, and M. Belenky's Procedural Knowledge and Constructed Knowledge Stages of intellectual development describe and help explain specialist achievement.

P. M. King and K. S. Kitchner (1994) describe seven stages in the development of reflective judgment grouped in three broad categories: 1) Pre-Reflective, 2) Quasi-Reflective, and 3) Reflective. They identify two stages (6 and 7) within the broad Reflective category. People using Stage 6 assumptions recognize “that problems that are complexly understood (for example, understanding that a problem can be approached from multiple perspectives, incorporating multiple kinds of evidence) require some kind of thinking action before a resolution can be constructed. .... [T]hey can compare and relate the properties of two different views of the same issues. .... [Individuals using Stage 6 assumptions will usually reject the terms right and wrong when evaluating arguments, they will suggest that one view is better, explaining that the other view has less evidence, that it is less appropriate or less compelling for the particular situation at hand, and so on” (pp. 67-68). In Reflective Stage 7, people “take on the role of inquirers; they are agents involved in constructing knowledge. .... They are aware that their current knowledge claims may later be superseded by more adequate explanations. ... [In Stage 7, people are able] “to abstract generalizations about inquiry from frequent participation in the inquiry process” (pp. 70-71).

The research reported in this section about achievements of specialists is all based in European American cultures. Studies of specialist achievement in other cultures would be valuable additions that, undoubtedly, would reveal at least a few alternate characteristics of specialists. For example B. K. Hofer and P. R. Pintrich propose that "it is possible that in a more collectivist culture in which the view of self has interindividual implications, personal theories of knowledge and knowing could evolve toward an acceptance of consensus, not a reliance on independent thinking" (1997, p. 130).