

writing strategies such as small group problem-solving. The picture that emerges from the ethnographic material is of WAC as catalyst, as change-agent. Each instructor comes to a workshop with different expectations and leaves having found something unique in the exchange. Some faculty members have developed new strategies and assignments (some of which are shared in the book). Others used the experience to reconsider teaching philosophy. The authors include some dissenting voices; for instance, the observation is made that WAC is permeated by a 'true believer' mentality. While cautioning that each WAC program is unique to its institution, the authors claim that the same themes emerge from research at the three institutions. The authors build an image of WAC as community, providing safety for self-reflection through collegial support and validation for innovative teaching.

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MIHALY CSIKSZENTMIHALYI, KEVIN RATHUNDE, & SAMUEL WHALEN.  
*Talented Teenagers: The Roots of Success & Failure*. Cambridge, United Kingdom: Cambridge University Press (first published 1993; paperback edition 1997).

The book discusses factors that affect the perseverance over three years within talent fields among a sample of gifted secondary students enrolled in a set of Chicago area public schools. As such, this work joins the short list of high-quality longitudinal studies of high-ability individuals, beginning with that initiated by Terman (1925). The present research should be of particular interest to researchers, educators, and makers of policy. It is of secondary interest for secondary education generally considered, as well as to researchers and practitioners involved in career development, career counselling, and the development of school-to-work programs. (The work would be of greater interest to these groups had the authors included appropriate references to the vocational literature, which is nearly wholly absent.) Finally, the book may be of value to parents of gifted children, who will appreciate the authors' efforts to write in plain language rather than professional jargon, although some technical terminology is unavoidable. The new paperback edition undoubtedly makes the book more affordable to a wider audience, but it is also (unfortunately) now at least five years behind the most current literature on the subject. (Only five references are as recent as 1992, with most of these by the authors themselves.) Perhaps a revised edition should have been produced with the introduction of the paperback in order to maintain the work's currency.

*Talented Teenagers* reports the results of a study of 200-plus secondary students identified as gifted by their teachers and schools, drawn from four fields of "talent" (some students were multi-talented, accounting for the sum being larger than 200): (visual) art (27), athletics (64), math (38), music (67), and science (27). The investigators assumed that motivation is the key to the development of talent, and throughout the work they stressed that the great challenge of working with talented teenagers is not so much in the cognitive as in the *conative* realm. The authors therefore did not investigate the contribution of intellectual abilities, except indirectly through teacher-report and ratings. I view this as an important limitation of the study, but one that does not detract from the otherwise valuable findings reported.

The students completed objective measures of personality (tapping needs and self-image) and family context (yielding degrees of integration and differentiation within the family). They also completed interviews and participated in Csikszentmihalyi's experience sampling method (ESM), in which students record in a journal (using standardized questions) their experiences (what they were doing and how they felt about it) whenever a pager would (at random times) sound. The qualitative and quantitative data the authors thereby collected provides a fascinating window on the lives of talented teens, and complements the authors' earlier work with a comparable sample of average ability teens.

The results led the authors to propose a set of eight factors associated with talent development. These are listed below (quotation marks omitted; the italicized statements drawn fairly directly from the text):

1. *To be recognized as talented, children must have skills that are considered useful in their culture.*
2. *Talented students have personality traits conducive to concentration as well as being open to experience.*
3. *Talent development is easier for teens who have learned habits conducive to cultivating talent.* In particular, compared to the average teenager, the present gifted sample reported relatively more concentrated attention to what I would call "investment" tasks (studying, hobbies, challenging pursuits with friends) and relatively less concentrated attention to (my term) "inertial" tasks (just hanging out with friends, doing chores, watching television). Tellingly, the gifted sample spent less time working in paid jobs than did the non-gifted comparison group.

4. *Talented teens are more conservative in their sexual attitudes and aware of the conflict between productive work and peer relations.*

5. *Families of the talented provide both support and challenge that enhance the development of talent.*

6. *Even the best home environment may be undermined by negative learning experiences at school; talented teenagers liked teachers best who were supportive and modeled enjoyable involvement in a field.*

7. *Talent development is a process that requires both expressive and instrumental rewards.* The results showed that students in the arts (art, music) enjoyed their work more (high intrinsic reward) but lacked a clear understanding of how their talent would or could develop into a real career (low extrinsic reward); conversely, science students (science, math) showed the reverse, with a clearer appreciation of the extrinsic rewards but with relatively weaker intrinsic satisfaction compared to the gifted arts students. The implications drawn by the authors would be to make science more fun (especially for students gifted in the sciences) and to make the arts more relevant to long-term career development (especially for students gifted in the arts). I think the authors stumbled here a bit; there are so few jobs in the arts that realistically most students are going to find making a career in the (fine) arts extremely difficult. Still, I think they are right in suggesting the need to teach teenagers how an investment in talent development during adolescence might reap benefits in adulthood

8. *A talent will be developed if it produces optimal experiences.* The authors recommend the reform of schools and education so as to maximize the degree of optimal experience of children and particularly gifted ones by shifting their attentional states toward greater complexity and to thereby maximize the opportunity for the creation of an autotelic (i.e., self-guiding and motivating) personality that is capable of sustained and repeatable "flow" experiences. (I assume that the reader is familiar with the flow concept; if not, read Csikszentmihalyi, 1990/1991.) The authors put special emphasis on the complexity construct. According to them, complexity results from a synthesis of tendencies toward differentiation (related to challenge) and integration (related to support). The authors organize their presentation of data to provide a compelling argument that complexity is a very good thing across the major facets of the lives of gifted adolescents (family, classrooms, personality). In particular, complexity predicts remaining in one's talent field as well as continued interest in that field.

## Book Reviews

The authors fail, however, to consider that complexity is *itself* likely to have an underlying basis in cognitive traits. I refer not to general intelligence or “g,” but rather specific reasoning-related abilities that I believe based on my reading of the *Talented Teenagers* may be the root “primary” abilities that facilitate learning cognitive skills supportive of either differentiation or integration. Although Csikszentmihalyi et al. acknowledge the intellectual roots of such reasoning systems in William James’ writings (in their discussion of his “sister passions,” p. 257), they nevertheless fail to update and relate these constructs to present-day trait-based approaches to reasoning abilities. However, there is now substantial evidence that there exist two systems of reasoning (Slovan, 1996, who also cited James’ discussion of the two systems) for which there exist indicators in readily available cognitive test batteries (e.g., the *Ball Aptitude Battery*; The Ball Foundation, 1995). More generally, I remain unconvinced on the basis of the research reported in the book that aptitudes are not one of the major factors affecting the talent development of adolescents, including gifted ones.

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VICTOR VILLANUEVA, JR. (EDITOR). *Cross-Talk in Comp Theory: A reader*. Urbana, IL: National Council of Teachers of English (1997). 786 pp. US\$34.95 (NCTE members US\$24.95). ISBN 0-8141-0809-1.

This long overdue book is a compilation of greatest hits from the young discipline of composition studies. The 41 essays it contains chart the chronological and intellectual growth of the discipline from its birth roughly 30 years ago to the present. The editor of the collection, Victor Villanueva, claims a modest readership in his Preface, limiting the audience to teachers and students of writing. However, although the book has clearly been prepared with a graduate composition course in