

**ZMATH 1997a.00037**

**Miller, Philip**

**Evolution of Novice Programming Environments: The Structure Editors of Carnegie Mellon University.**

Interact. Learn. Environ. 4, No. 2, 140-58 (1994).

Describes three projects at Carnegie Mellon University (Pennsylvania) that developed novice programming environments based on structure editors: GNOME, MacGNOME and ACSE (Advanced Computing for Science Education). Tracks the evolution of the programming environments and courses, documenting important lessons and discoveries about novice programmers and the environments that support them. (ERIC)

*Classification:* Q65

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