History in the Computing Curriculum

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Abstract - History of the subject has always been included in the arts, mathematics, and science curricula. In computing, however, history seldom receives the status it justly deserves. Since the 1960s, the ACM and the IEEE Computer Society produced several curriculum recommendations. While these recommendations are commendable, they hardly address an important component of computing education -- history.

Instructors often ignore or diminish the inclusion of history in computing when teaching courses. This is unfortunate, because students and teachers can learn much from the history of computing. From a cultural standpoint, history broadens one's perspective on the field and lets students and scholars explore the inner thinking of people and events. From a practical standpoint, history enables individuals and enterprises to learn from the events of the past, to avoid errors, and to improve on current experiences. Both views are necessary to create an educated and informed computing professional. History should be a part of human understanding. It should provide reflection on how projects can affect the human-machine environment.

Establishing an awareness of history in the computing field is essential. This awareness leads to history as an important learning tool, both for student and practitioner. The awareness and importance of computing history presume that the inclusion of history is a component of the computing curriculum.

Recently, interested parties from several nations organized a task group to effect curriculum changes that include history of computing as a part of a student's learning experience. The task group, formed jointly from IFIP’s TC3 and TC9 areas, considered some preliminary models and formulated recommendations on how programs can include history in the computing curriculum.

This panel, a subgroup of the IFIP joint task group, will discuss recent outcomes on this issue. It will present several models that instructors can use to place history as a curriculum component. It will share its findings and provide handout summaries for comment, discussion, and feedback. The panel members strongly encourage audience participation and interaction.