Chair’s Report

The Human Factors and Ergonomic Society Training TG held its business meeting at the annual conference in New Orleans on September 15th. We had a lively and energetic discussion of current and future issues with the TG and in this report I present a brief overview of these items.

First, Steve Fiore presented a summary of the 2004 Training TG program. We had one lecture session and seven poster presentations. Following a specific request from Steve for thematically related sessions, we also had two symposiums: “Improving Distributed Simulation-Based Training” and “Expanding and Incorporating Approaches from Traditional Intelligent Tutoring Systems into Scenario-Based Training Systems”. All sessions were well attended. Thanks, Steve, for all your hard work and effort! And thanks to all the presenters and the organizers of the sessions!

Second, we reviewed the current Training TG brochure used by HFES and this spurred some lively discussion about the scope and objectives of the Training TG. Our concern was that the brochure is somewhat dated and doesn’t clearly represent the focus of the TG and benefits. We decided to address with an article in this Newsletter, and Dee Andrews took on the task of presenting some thoughts on expanding the scope of the TG to include organizational learning.

Third, we also reviewed the TTG financial statement and membership. As is the case with a majority of the technical groups, membership in the TTG is declining. We have 207 members, which is down from 259 at the beginning of the year.

The discussion on the finances of the TG stimulated some proposals on how we can use our funds to give back to the members. Two ideas were proposed. The first is to recognize exemplary student work with a “Best Student Paper” award. The second is to provide an annual student research grant. Please see the articles appearing later in this Newsletter for more details.

Finally, but my no means the least, we are seeking nominations to fill the Training Technical Group positions. We plan to have elections in the Spring so that we can have the new officers assume office at the 2005 Annual Meeting in Orlando. This issue of the newsletter includes a call for nominations. Please use this or the on-line ballot (http://ttg.hfes.org/ballot-2005.html) to make nominations by February 25th, 2005.

I’d like to conclude with my assessment of the state of the TG. I have enjoyed working with the members of the TG. I have at times, however, been concerned about the interest in the TG. Specifically, compared with some of the other TGS, our Business Meetings have been sparsely attended. Our membership is strong, which indicates a strong interest in the products of the TG, and the sessions sponsored by the TG have been well attended which indicates the research and technologies are timely.

As I pondered what more we could do to stimulate involvement in the TG business meetings, I realized that our TG is more than just the Business Meeting. I did a search of the papers from the proceedings from the 2004 meeting and found 323 papers out of 567 mentioned “training” in them. Now, not all of these were related to training research and applications. Nonetheless, I sampled some of these papers, and found that about 75% of them directly applied to some aspect of training design, development, evaluation and implementation!

As I scan the scope of the other TGS, training touches almost all of them. So the world of training research is alive and well. Many of our TG members (as am I) are active in multiple TGS, so they are spreading the gospel of training to the others. Given my unscientific assessment of the past conference, it’s working. Training is a predominate thread across the Society. This should come as no surprise because training requires a complete understanding of all of the dimensions of human performance and all of the factors that affect human performance. You can’t train someone in a skill without first understanding the factors that affect performance. That’s why we have the Training TG, to ensure that thread remains strong and growing. It’s working, so I guess I can rest now knowing that our members are actively engaged in the work and looking towards the future of training research.

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Is it Time for the Training Technical Group to Expand its Scope?

The *Learning Organization* construct is becoming a vital part of organizational strategies that strive for continuous improvement and maintaining of competitiveness. Learning Organizations are defined as entities that create and use new knowledge, and modify their organizational behavior based on that new knowledge. One of the major results of this movement has been the recognition that organizational learning is vital for growth.

While there have been some interesting successes as organizations seek to improve their learning capacity, it is still too early to say if the LO movement will ultimately be successful. Some professionals see faddish elements in the LO construct. However, what does seem clear is that many organizations now see the traditional training function as changing. Innovative organizations are moving toward learning functions that are much more workplace centered than in the past. The traditional approach of stopping work to be trained in a formal setting is changing. On-the-job training has always been an important part of technical training, but now the nature of how personnel learn on the job will also be changing.

In some organizations this movement has led to the dissolution of training departments that are frequently not viewed as being aligned with an organization’s strategic goals. They have been replaced by a more dynamic agenda geared towards making learning a regular part of the organization’s functioning, rather than being only a “training” add-on. Human factors technical trainers, typically focused on system training, can serve a vital role in this conceptualization of the Learning Organization. However, the community risks being marginalized, or even eliminated, if it does not understand and embrace the new view of learning’s place in the organization.

The technical training community can have an important role to play in these changes as we bring substantial experience and skill to the issue. Our ultimate impact in this new world of learning will be based, I believe, on how well we understand the learning organization construct and how well we can change our behavior and attitudes to be key players in the coming years.

I suggest that it would be healthy now for our Technical Group to debate the mission scope of our Group. Our current description of the scope seems to me to be fairly limited (see inset). The Focus statement presented in the inset, which has served us well for many years, is aimed at the technical parts of training (e.g., technology, AI, training techniques, programs of instruction). Our focus has most usually been on the operator and maintainer of equipment. That is as it should have been given that we are, after all, part of the HFES.

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**Current Training Group Technical Focus**

Human factors practitioners working in the field of training are involved in training development and research. The technology of training has advanced dramatically in recent years with the advent of such developments as low cost computer generated visual displays, training approaches using artificial intelligence, and networking of computers for training.

The human factors practitioner is an important part of a team responsible for designing and implementing training for large systems and training devices. Specific activities include the following:

- Developing user profiles that match equipment characteristics
- Developing user interfaces, controls and displays, and technical information to train in operation and maintenance
- Developing, evaluating, and implementing innovative technologies and approaches for training
- Testing prototypes
- Evaluating training techniques and programs of instruction

Given the introductory paragraphs of this article, I believe we should consider expanding our scope to take into account the larger strategic context in which training for operators and maintainers occurs. My preference would be to expand the scope of our mission and focus. I suggest we consider how performance improvement interventions, most especially training (but not necessarily limited to training interventions), should fit into an organization’s overall strategic picture. I know that many of the efforts in this Technical Group have made such considerations, however I think we could, and should, reach still farther. Perhaps the concept of “organizational learning” should be a topic for consideration. I truly believe that the relevance of training in the future depends upon this broader view.

Whatever we end up deciding as to our mission scope I believe our Technical Group will be healthier for the discussion. What are your thoughts on the topic?

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Training Technical Group
Proposal for Student Grant Program

Stephen M. Fiore
University of Central Florida

Program Introduction
The HFES Training Technical Group is considering the creation of a Student Grant Program to support student research in training theory and training experimentation. In this article I describe this idea and the proposed implementation process. On the final page of this newsletter is a ballot for voting in favor of, or against, this initiative (which can also be accessed online at http://ttg.hfes.org/ballot-2005.html). There are two main goals associated with Training Technical Group Student Grant Program™ (TTG-SGP). First, the primary purpose is to support the professional development of our student affiliates. Towards this end, the TTG-SGP is designed to foster the growth of a set of targeted competencies required by the professional scientist interested in training. By allowing student affiliates to oversee the management of this effort, affiliates can gain not only experience in the grant-writing process, but also experience in reviewing research grants. The second goal serves the long-term interests of the TG by providing another opportunity for our student affiliates to gain recognition of their work while in graduate school. The goal is to return something to our affiliates and foster goodwill towards the Society. In sum, this program provides an important opportunity for our affiliates to gain recognition for their efforts, thus strengthening the long-term viability of the field.

Program Overview
The TTG-SGP program is aimed at supporting our student affiliates in conducting independent research during their graduate education. In keeping with TTG objective of encouraging research in areas relating to training systems and theory, we would welcome research proposals in training related areas.

Program Implementation
We would offer financial support for research expenses including, but not limited to, the purchase of research materials; paying subjects; partial payment for equipment, etc. Each year we would offer 1 award of $750. Each proposal would be evaluated on the following criteria and written evaluation feedback would be provided on all submitted proposals:

1. Clarity in presentation of ideas (e.g., logical flow to description of literature; statement of the problem is succinct and clear)
2. Clarity of research methods and methodology appropriateness for the research question(s)
3. Likelihood of the project to explain some psychological phenomenon
4. Ability of the project to advance research in a specified area (theoretical and practical)
5. Budget match for scope and requirements of the research

Next I describe what would be required to have the grant proposal considered for the TTG-SGP and the information that would need to be submitted:

Cover Letter
Include the following information:
- Name and Current mailing address
- Telephone number and e-mail address
- Area of research
- University Affiliation
- Full name(s) of other(s) involved in the project

Letter from Faculty Sponsor
This letter should describe the amount of faculty involvement in the project, an assessment of the student’s capabilities in completing the project, and the degree of independence exhibited by the student in developing the research idea.

Proposal Narrative
Complete a typewritten (single-spaced, no more than 5 pages with 1-inch margins, 12 point Times Roman font) project description summarizing the purpose and methodology of the proposed project. This summary should include the research project’s title (without author’s name) at the top of each page and must include the following:

1. A coherent and brief summary of previous related research
2. Theoretical implications of the research
3. Practical implications of the research
4. Specific objectives of the current project
5. Clearly stated hypothesis or set of hypotheses
6. Proposed methodology
7. Budget along with budget justification explaining costs and why the expenditures are necessary

Institutional Review Board Approval
If appropriate, send verification that the research has been approved by your University’s Human Subjects Review Board.

TTG Newsletter

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**Planning for Orlando in 2005**

I wanted to remind everyone about the upcoming February 8th deadline for submissions to HFES2005. Submissions are electronic again this year and you can find the information you need at http://hfes.org/Meetings/05callforproposals.html.

Additionally, as the Training Technical Group Chair for the HFES2005 Conference, I am writing to continue encouragement of submission of self-organized symposiums. The Training TG really benefits from these forms of well-integrated thematic sessions. They highlight to the HFES community the far-reaching relevance and contributions of training research from a broader perspective. Training cuts across a number of technical groups and many of us are aware of colleagues doing research related to our own. As such, rather than fractionalize our efforts within the TG and across the Society, a thematic symposium would go a long way towards highlight similarities in training research.

Symposia can have up to 5 papers describing recent empirical or theoretical work on a related topic. The total amount of time is approximately 90 minutes. The basic requirements for a symposium are below and detailed information from the HFES Website can be found at the website:

- Symposia require an overview abstract of 150 words describing the symposium
- For each contributor to the symposium, a 150-word abstract, and a 2000-word summary is also required.

If you have any questions, feel free to call (407-882-0298) or email me at sfiore@ist.ucf.edu.

Sincerely,
Stephen M. Fiore, TTG Program Chair
University of Central Florida

**DEADLINES for HFES2005**

- Proposals for all presentation types due - **February 8**
- Accept/reject letters sent - March 28
- Proceedings Author Kits sent - April 15
- Workshop preliminary handouts due - April 15
- Workshop final acceptances sent - May 16
- Proceedings papers due - June 13

**Training TG Proposal for Best Student Paper Award**

Because our student affiliates are a vital part of our organization, the Training Technical Group wishes to support them in their professional development. As such, we are proposing a best paper award to be presented to student affiliates of the TG. To qualify, students must be members of the Training TG, first author on an accepted presentation, and they must have contributed substantially to the presentation’s scientific content (theory or experimental design). Either poster or paper presentations are acceptable. Nominations would be welcome following notification of acceptance from the Training TG. Reviews will be conducted by peer groups, that is, selected students from the Training TG. In addition to a certificate of recognition, a monetary award of $250 will be provided. Please seriously consider this important initiative and cast your vote using the ballots provided below or online at http://ttg.hfes.org/ballot-2005.html.

**Training TG Ballots**

Voting for TTG Student Grant Program

_____ I approve the implementation of a Training TG Student Grant Program

_____ I do not approve the implementation of a Training TG Student Grant Program

Voting for TTG Best Student Paper Award

_____ I approve the implementation of a Training TG Best Student Paper Award

_____ I do not approve the implementation of a Training TG Best Student Paper Award

**Nominations for Training Technical Group Positions**

**Nominations for TTG Elected Officers:**

These offices are elected by a vote of the membership. The chair must be a member of the Human Factors and Ergonomics Society.

Chair:________________________________________

Secretary-Treasurer:___________________________

**Nominations for TTG Appointed Officers:**

These officers are appointed by the Chair-elect prior to the annual meeting. If you or someone you know is interested in serving in these positions please provide his or her name.

Newsletter Editor:____________________________

Program Chair:________________________________

Please send your ballots via email or regular mail to the Training TG Chair (see addresses on p. 1). You can also access ballots on http://ttg.hfes.org/ballot-2005.html