MSFC Knowledge Strategy

• Advocate for NASA Knowledge policy
  • Cross-center knowledge exchanges
  • Support Agency-led knowledge initiatives and Agency-to-Center communication

• Foster a climate of
  • Knowledge sharing
  • Preservation
  • Knowledge seeking
  • Continuous learning

• Adapt proven knowledge practices to meet MSFC needs and challenges
MSFC Knowledge Suite

Marshall Road to Mission Success Workshop
- Case-study based learning communicates MSFC cultural expectations and provides a vision of the Center up, in, current, and future
- In collaboration with GSFC RTMS series

Case Study Practice
MSFC-authored Case Studies
Cross generational knowledge sharing

Pause and Learn
Reflective learning activity conducted after major milestones, events, and activities

MSFC Lessons Learned Distilling Team
- Cross organizational team that evaluates Lessons Learned for application and infusion

Integration
Identifying and communicating collaborative and complementary knowledge use or sharing developments

Knowledge Access
Enable access and search of information resources at MSFC
Information, Information, oh where art thou, Information?

- MSFC is seeking ways of helping various databases be accessible easily
  - One-stop-shop-type of idea
  - Seamless database search
  - Mechanics invisible to user
  - No major changes of the databases themselves

- The effort is in the formative stages with idea generation and information gathering
- Will stay aligned with Agency advancements in this area
Knowledge Integration

• Chief Knowledge Integrator responsibilities
  • Center-Agency liaison
  • Assist the Chief Knowledge Officer in executing knowledge strategy and initiatives across the Center
  • Identify knowledge needs and resources for leveraging and cooperation
  • Arrange discussions that enable knowledge sharing and cooperation
  • Lead the Distilling Team
  • Advocate for NASA knowledge policy

• Knowledge Integration is ultimately everyone’s responsibility
  • A point of contact with awareness of resources and activities increases communication

Because electronic tools are not always the most effective way to communicate
MSFC Lessons Learned

- MSFC-developed processes
  - Capture and infuse Lessons Learned
    - Focused on implementation
  - Promote awareness of Lessons Learned at organizational level

- Lessons Learned Processes
  - Support reflective learning and knowledge capture
  - Keep lessons in context

- MSFC LL Distilling Team
  - Distill and infuse lessons
  - Advise groups on LL capture and infusion techniques and options
  - Seek and promote use of LL in home organization
Reflective Learning through Pause-and-Learns

- Goal is to have Pause-and-Learns (PaLs) become a common and cultural practice at MSFC
  - Support reflective learning
  - Aid in knowledge capture & sharing
  - Learn to see from different perspectives
  - Keep lessons in context
- Resources becoming available to Marshall employees for implementing in teams and on projects
- Already implementing as a standard practice on hands-on learning projects that are mentored through Training
Case Study Writing and Case Study-based Learning

- Methods for writing case studies are well established
  - Case study-based learning is often used in various disciplines (medicine, business, social science) but not frequently in science and engineering

- MSFC is initiating an effort to teach case study writing to generate MSFC-specific case studies
  - Preserves the history of the Center and of space flight
  - The process of developing case studies aids in retaining and transferring knowledge between generation
  - Cases may be used in training classes or for general knowledge

- First Case Study Writer’s Workshop planned for June 2014
Road to Mission Success Marshall-style

- Patterned after the GSFC Road to Mission Success course
  - Case Study-based learning
  - Decision making scenarios
  - Big-picture Center Mission Context
    - Across Center organizations
    - Relationship interfaces outside Center

- GSFC RTMS Template:
  - Three 2-day workshops over 6 weeks
  - Conducted by Center CKO
  - Discussions by high level organization leaders
    - Center Director, Programs and Projects, Institutional, & Disciplines
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• **MSFC LL webpage on NEN Lessons Learned website:**
  - https://nen.nasa.gov/web/ll/msfc