

### Growing Your Teaching Methodology in BMT Staff Education: Going Beyond PowerPoint™



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### Memorial Cancer Institute/Memorial Hospital West BMT Program

- Community healthcare system located in South Florida – Broward County serving population 1.9 million
- 1 of only 5 BMT adult programs in Florida
- BMT Program since 2007
  - FACT accredited for autologous BMT
- 12/11 – opened 40 bed inpatient/outpatient unit



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### MCI/MHW BMT Program Background

- June 2013 planned expansion to include allogeneic transplantation
- Increased complexity of allogeneic transplant mandated that we improve the effectiveness of our educational process
- 4 months to educate 60 nurses & support staff



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### How to Grow Your Teaching Methodology

- Recognize oncology nurses as adult learners
- Utilize educational theory & research on adult learning
- Avoid a “death by PowerPoint™” approach to education
- Apply teaching methods that facilitate adult learning
- Engage both novice and experienced BMT nurses



Source: Nursing World

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### Perspectives - Our Team of Experts

• Medical Director	• Blood Bank Chief Technologist
• Program Manager	• Radiation Physicist
• BMT Nurse Coordinators	• BMT ARNPs
• BMT Quality/PI Coordinator	• Physical Therapist
• Clinical Specialist	• Dietician
• BMT Infusion Nurses & Clinical Manager	• Social Worker
• BMT Pharmacist	• <b>BMT Patients, Families &amp; Donors</b>
• Oncology Psychologist	

Source: Nursing World

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### Kolb’s Learning Theory

- Adult learning is a holistic perspective that combines experience, perception, cognition and behavior
- Learning is cyclical and involves acquiring abstract concepts that can be applied with flexibility in a range of situations

“Learning is the process whereby knowledge is created through the transformation of experience” (p.38).

Source: Kolb, D.A. (1994). Experiential Learning as the Source of Learning and Development. Prentice-Hall, Inc. Englewood Cliffs, N.J.

Source: Nursing World

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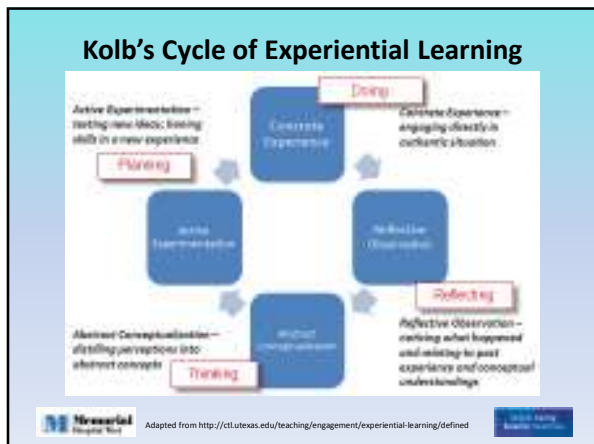
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### Abstract Conceptualization

### Active Experimentation

### Concrete Experience

**Thinking, Planning & Doing:**

- Use of Audience Response System
  - Engraftment exercises
  - Blood product support & ABO Incompatibility
  - BMT complications & nursing interventions

Adapted from <http://ct.utexas.edu/teaching/engagement/experiential-learning/defined>

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### Concrete Experience

### Reflective Observation

**Watching & Reflecting:**

- YouTube video
  - DKMS Donor search
- NMDP educational resources

Adapted from <http://ct.utexas.edu/teaching/engagement/experiential-learning/defined>

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Concrete Experience  
Reflective Observation  
Abstract Conceptualization

**Doing, Reflecting & Thinking:**

- Professional & personal reflection activities
  - Compassion Fatigue
- Group discussion
  - Compassion fatigue awareness
  - Preventive strategies



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Concrete Experience  
Reflective Observation  
Abstract Conceptualization

**Doing, Reflecting & Thinking:**

- Panel discussions
  - Patients & Family Caregivers & Donors



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Active Experimentation  
Concrete Experience

**Testing, Planning & Doing:**

- Stress Management Plan
- Mindful meditation exercises
  - Abdominal breathing



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Learning Cycle	Teaching Methods	Content Examples
<b>Concrete Experience</b> <i>Doing</i>	Practical Exercises Discussions/examples Games ADR – I-Clicker® Panel Discussion	BMT Search YouTube BMT Donor Search Examples GVHD examples BMT Survivors Panel
<b>Reflective Observer</b> <i>Watching</i>	Videos Discussions Reflective questions ADR – I-Clicker®	NDMP education video Nursing Challenges – Compassion Fatigue Blood Product Support
<b>Abstract Conceptualization</b> <i>Thinking</i>	Lecture Analogies Models & Theory	Overview of BMT Pharmacology 101 HPC Infusion & ECP Therapy Acute & GVHD
<b>Active Experimentation</b> <i>Testing &amp; Planning</i>	ADR – I-Clicker® Mindful Meditation Simulations Panel Discussion	Engraftment Stress Management Compassion Fatigue Plan BMT Survivors Panel

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### Teaching Strategies



- Audience response system [ARS]
- Critical thinking exercises
- YouTube & Internet videos
- Games
- Case studies
- Mindful meditation exercise
- Professional & personal reflection activities
- Survivorship panel discussions





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### Course Content Day 1



- Introduction to BMT
- Donor Search & Selection
- HPC Collection, Processing & Storage
- Extracorporeal Therapy
- FACT Update
- Psychosocial Perspective & Care





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**Course Content**  
**Day 2**



- BMT Pharmacology 101
  - Preparative regimens
  - Immunosuppression therapies & Supportive Care
- Total Body Irradiation
- Blood Product Support & ABO Incompatibility
- HPC Infusion
- Engraftment
- Acute Complications & GVHD
- Nursing Considerations & Evidence-based practice



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**Course Content**  
**Day 3**



- Exercise & BMT
- Chronic GVHD
- Supportive Care
  - Psychosocial
  - Nutrition
- Nursing Challenges – Compassion Fatigue
- Survivorship
- Patient & Caregiver/donor Panel Discussion



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**Findings & Interpretation**

- 72 staff attended program since 06/2013:
  - BMT/oncology nurses
  - Case Resource Managers
  - Research Nurses
  - Pharmacists
  - Physical Therapists
  - Dieticians
- 96% learners rated program excellent [1-10 scale]



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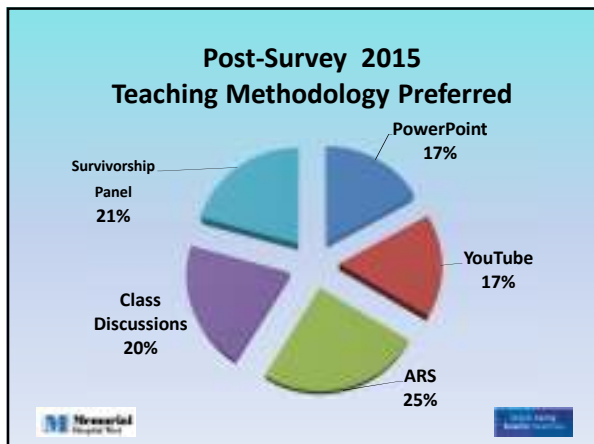
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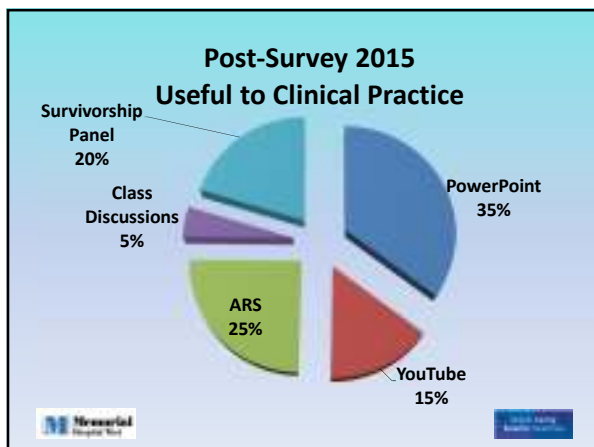
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- ### Future Directions
- Expand allogeneic transplant topics
  - Re-evaluate our teaching strategies
  - Routinely survey staff 6-12 months post-class

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## Conclusions

- Adopting a team approach, especially incorporating patients and family perspectives, is key to adult learning
- Applying teaching strategies beyond PowerPoint supports experiential learning theory and styles
- Teaching the complexity & intensity of BMT care is enhanced through various experiential learning activities
- Designing learning activities to encourage classroom interactions results in a high level of learner satisfaction well after initial course



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*"Tell me and I forget.  
Teach me and I remember.*



***Involve me and I learn".***

*~ Benjamin Franklin ~*



Wikipedia, 2015



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