Performance Support '99 ~ Session 520

The Relationship Between Distance Learning, CBT and EPSS

~

Common Checklists

Duane Degler
Performance/Information Consultant ~ IPGems
www.ipgems.com

IPGems

Introduction

- In this session, we will be exploring…

  – The effect of context and environment on information use

  – The design attributes of online learning materials to promote reusability for electronic performance support systems (EPSS)

  – Common and uncommon design elements which will help create more "future-proof" products

- The goal of this session is to create a first draft design checklist for your future design projects
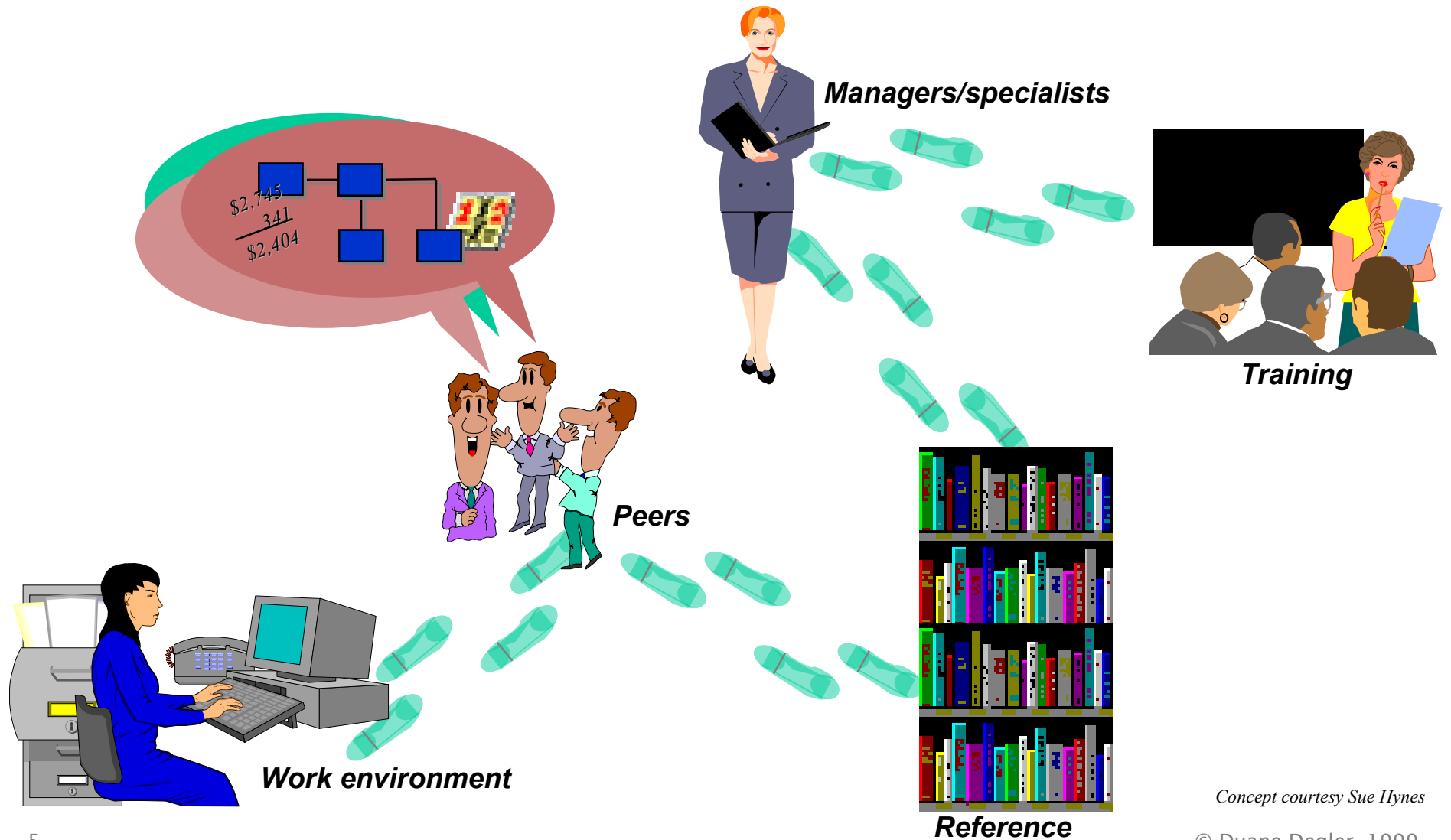
First Questions

Is the performer's immediate **work** *environment*

the most suitable **learning** *environment*

for the content being presented?

How compatible are **doing** *something*

and **learning** *something?*

Not Just UI . . . IU !

- Information Usability should be a focus of *all* content design and development activities

- The purpose of providing the content in an EPSS environment is to make information usable when and where the work is being done…

- How many different ways to use information resources are there? How many will there be?

A Starting Point: Getting Answers ?

Managers/specialists

Training

$2,745
341
$2,404

Peers

Work environment

Reference

Concept courtesy Sue Hynes

Why Think Differently for EPSS ?

Context !

- The **Environment** in which information is used is often different from "learning" or "researching"

- The **Interactions** that facilitate locating and using information are more integrated with working tools

- The **Resources** must be geared to meet the needs of the user in the environment, using the methods of interaction available

Some Design Comparisons
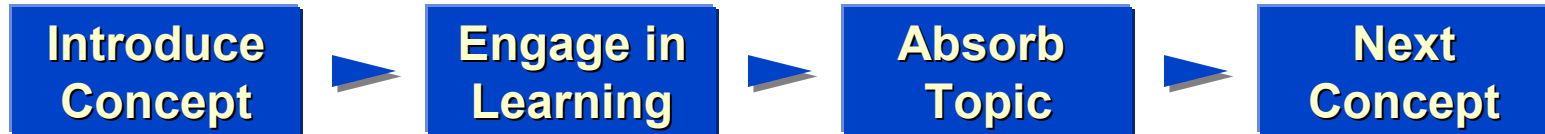
Online Learning:

- Topic-level granularity

- Thematic consistency

- Right and wrong scenarios

- Move at own pace

- Revise/reiterate to mastery

- Score learner competence

- Long-term memory retention
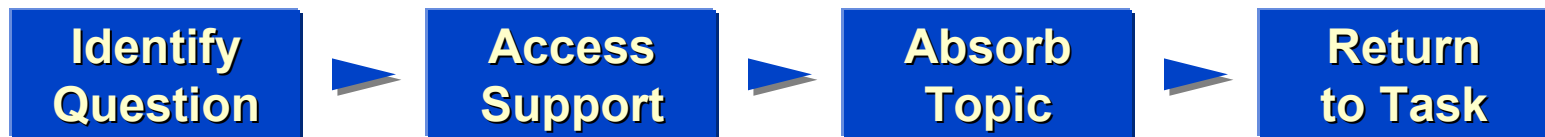
- Shelf-life

EPSS:

- Hint-level granularity

- Context relevance

- One clear instruction path

- Locate only what is needed

- Apply immediately to a task

- Perform competently

- Short-term task effectiveness

- Rapid update ability

An Issue of Flow . . .

Online Learning:

| Introduce Concept | ▶ | Engage in Learning | ▶ | Absorb Topic | ▶ | Next Concept |

EPSS:

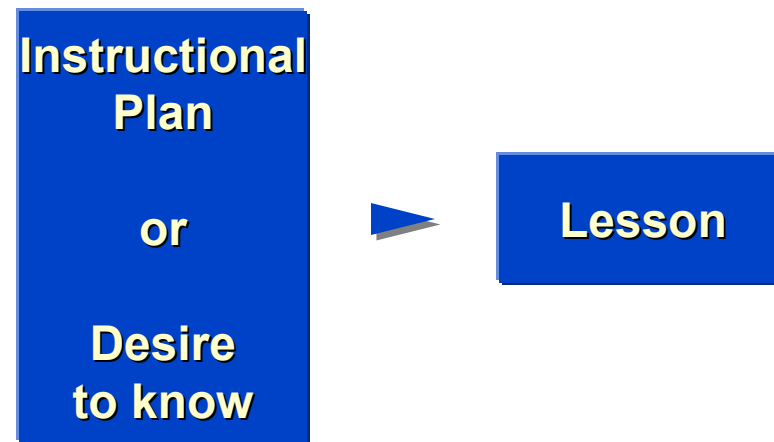| Identify Question | ▶ | Access Support | ▶ | Absorb Topic | ▶ | Return to Task |

Designing Online Learning
with EPSS in Mind
~
Questions and Checklists

What are the Key Questions ?

- What motivates people to use information?

- What learning approaches will work?

- How much flexibility and granularity?

- What media to use ~ to store and to display?

- How do people find information?

- How easy is it to use the resources?

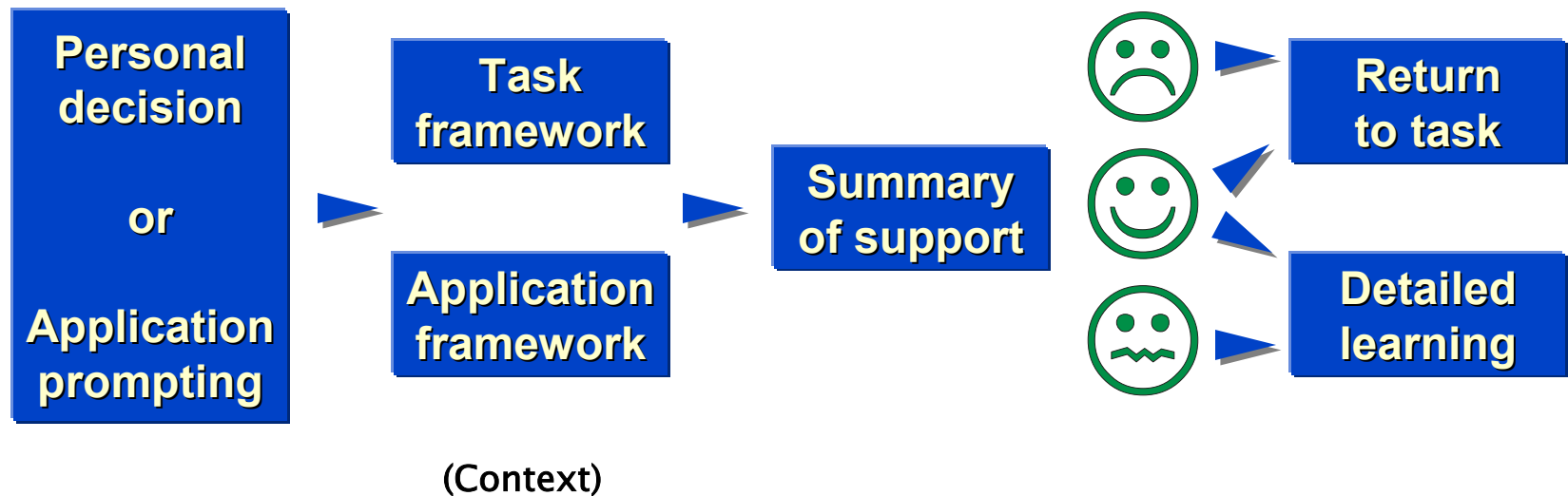- How can record-keeping and scoring be managed?

What motivates people to use information?

- When using online learning directly…

What motivates people to use information?

- When using an EPSS…

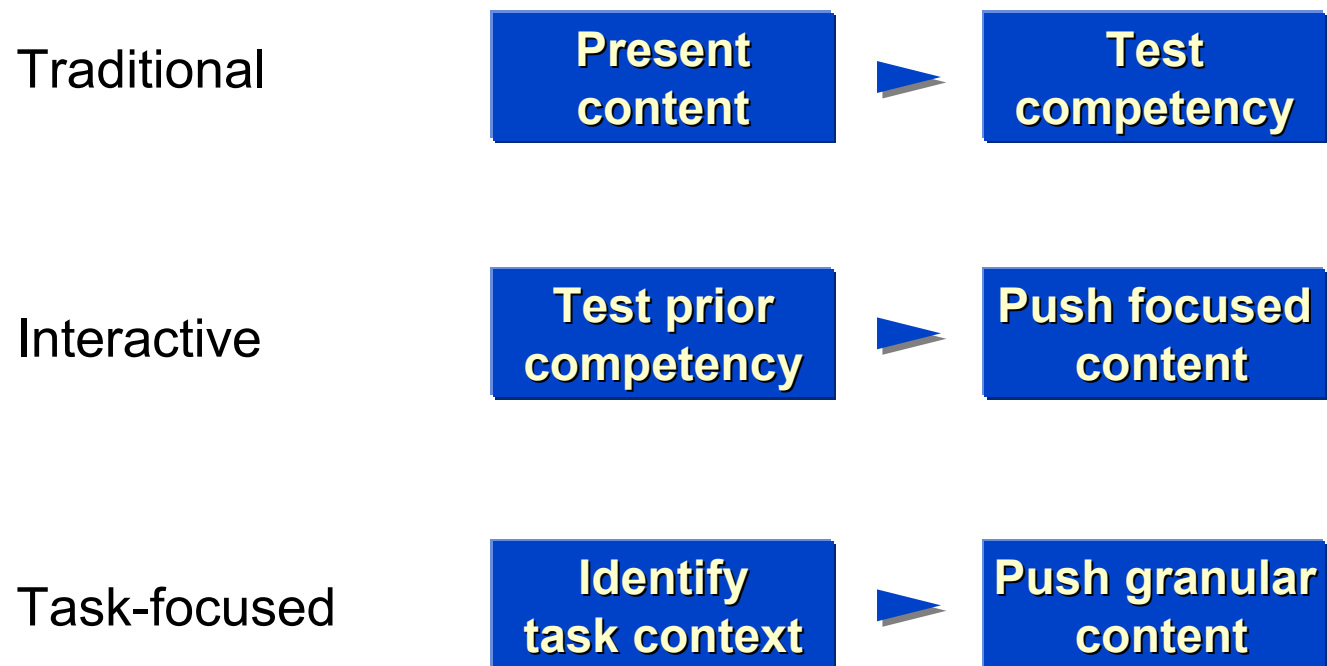| Personal decision or Application prompting	Task framework		Summary of support		Return to task
	Application framework				Detailed learning

(Context)

What motivates people to use information?

- Make sure the experience has a positive outcome

- If not, make sure the performer knows where else to turn for help

- Keep the messages consistent... but not the same

- The experience of getting support/training should be as simple and transparent as possible

- and yours are . . .

IPGems

What learning approaches will work?

- Presentation strategies

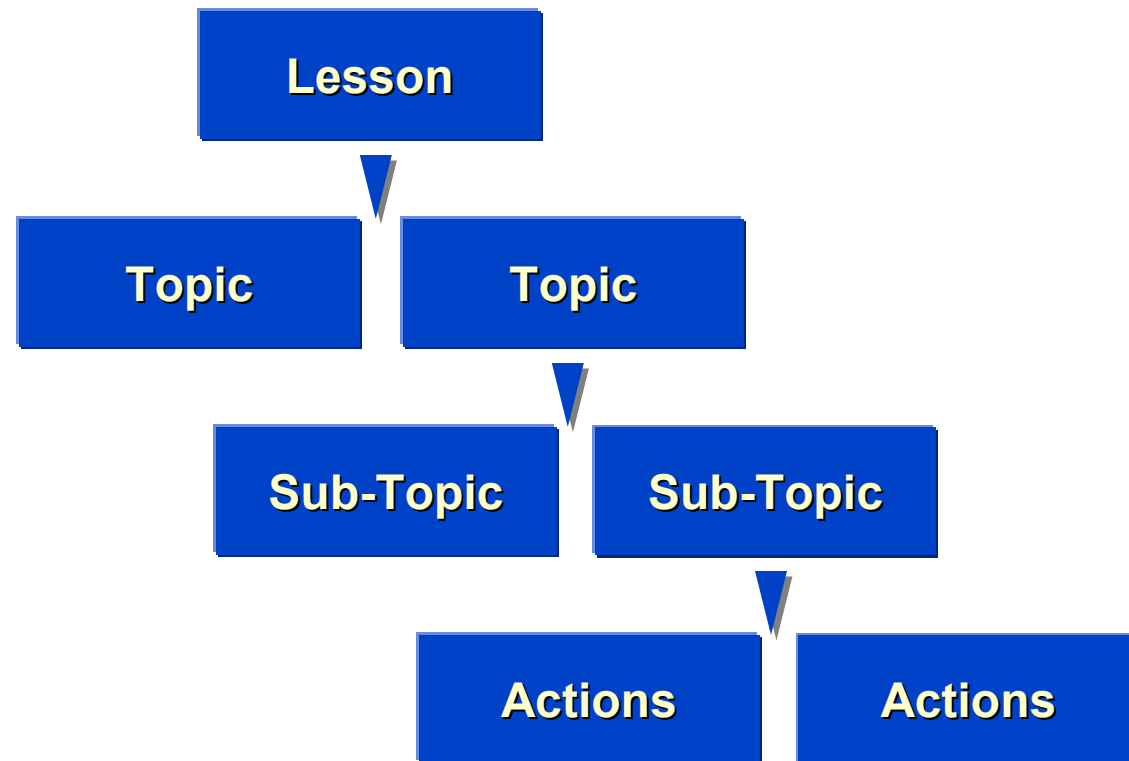|		
Traditional	**Present content**	▶ **Test competency**
Interactive	**Test prior competency**	▶ **Push focused content**
Task-focused	**Identify task context**	▶ **Push granular content**

IPGems

What learning approaches will work?

- Focus on evaluating need before presenting content

- Separate conceptual and procedural content

- Create flexibility in presentation approach (you can't predict why a performer asks a question)

- Clarify the need, don't preach the message

- Point to other avenues for getting answers outside the learning environment

- and yours are . . .

How much flexibility and granularity?

- Lesson granularity

```
                    Lesson
                      │
        Topic         │      Topic
                      ▼        │
              Sub-Topic        ▼  Sub-Topic
                                    │
                      Actions       ▼  Actions
```
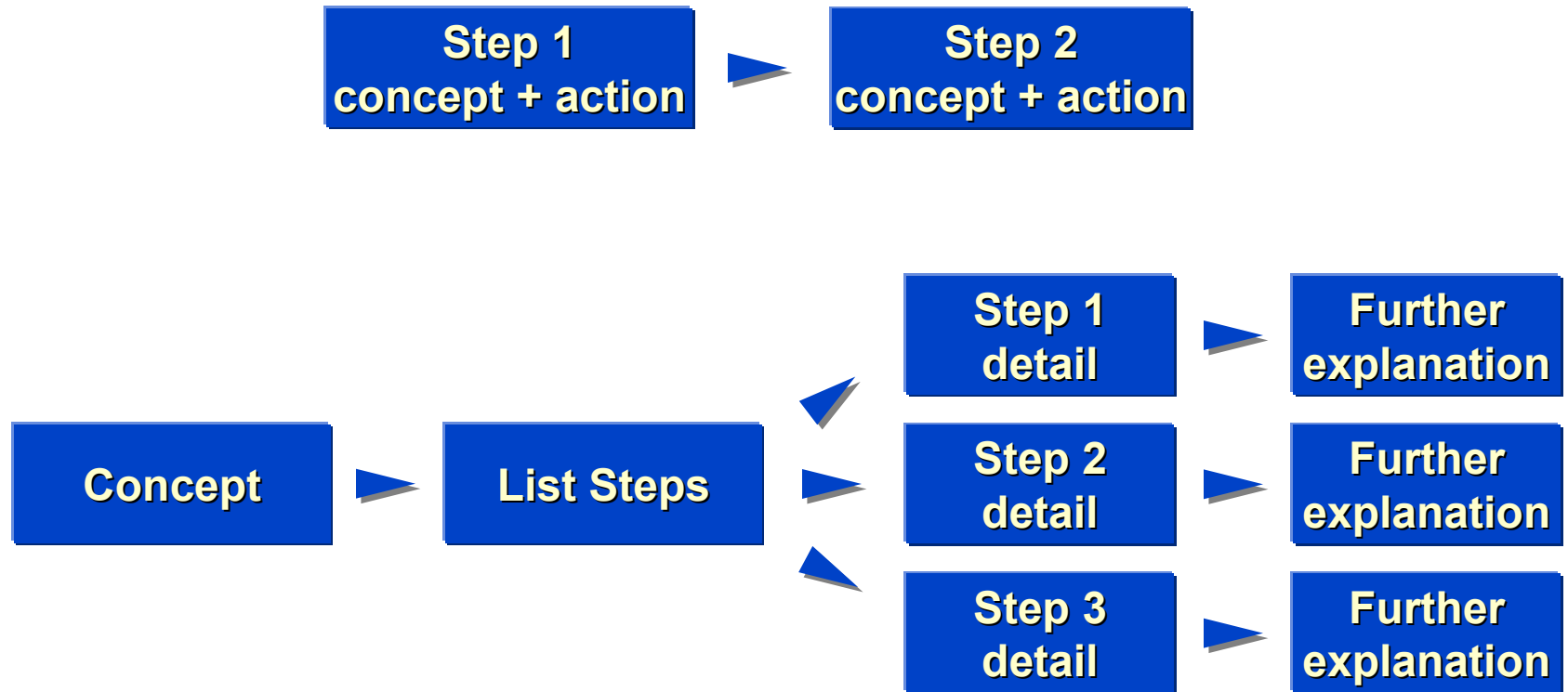
How much flexibility and granularity?

- Content granularity

| Step 1 concept + action | → | Step 2 concept + action |

Concept → List Steps →
- Step 1 detail → Further explanation
- Step 2 detail → Further explanation
- Step 3 detail → Further explanation
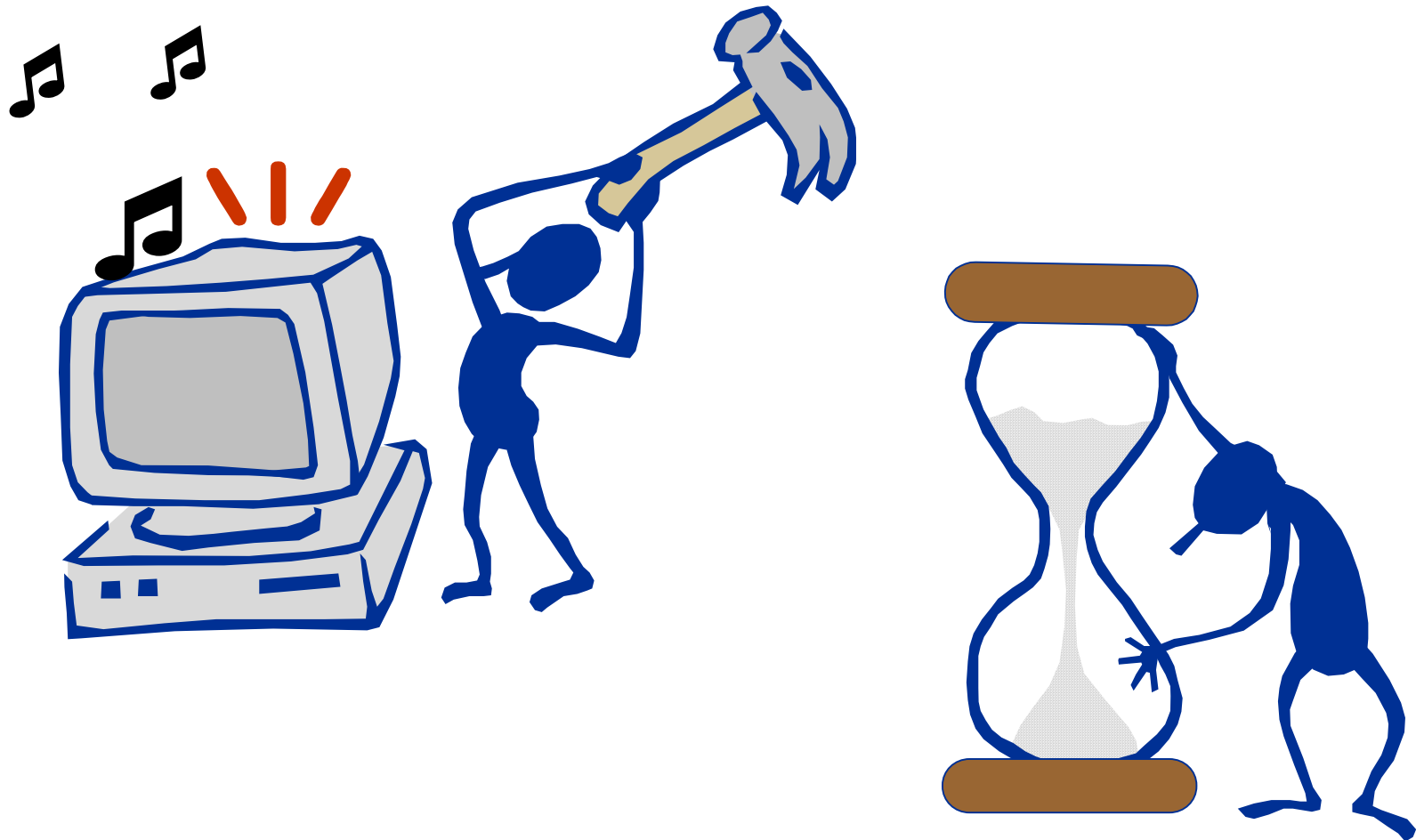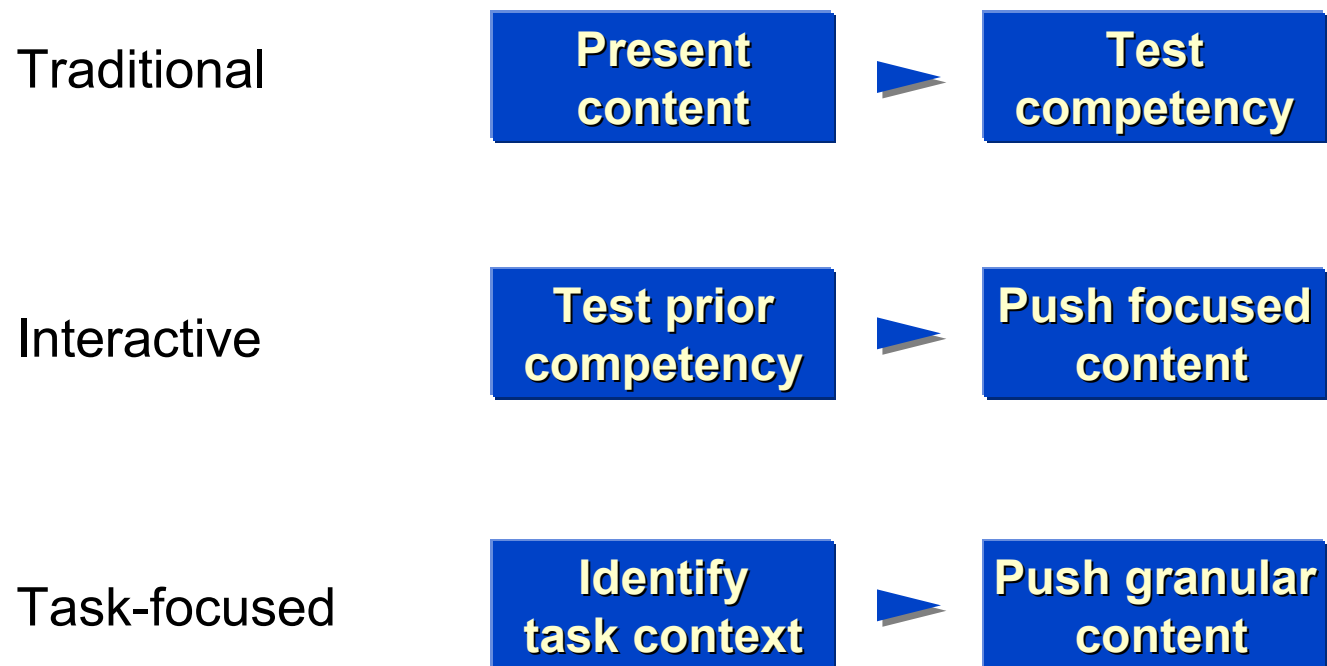
How much flexibility and granularity?

- Apply process and context models to content, along with traditional hierarchical learning approaches

- Create clear, small, discrete segments

- Watch for assumptions about what material has been seen before

- Structure for flexible entry, exit, navigation and linking

- Signpost content segments clearly

- and yours are . . .

What media to use ~ to display?

What media to use ~ to store?

- Presentation strategies

Traditional	**Present content**	▶ **Test competency**
Interactive	**Test prior competency**	▶ **Push focused content**
Task-focused	**Identify task context**	▶ **Push granular content**

IPGems

What media to use ~ to store and to display?

- Use media appropriate to the content

- Use media appropriate to the user environment

- Make sure the media is able to be delivered quickly and simply on the user's desktop system

- Keep it simple!

- Make sure the media allows easy access and modification to the content later

- and yours are . . .

How do people find information?

- Time for a break in the routine . . .

How do people find information?

- Don't assume you know the language and phrases that people will use to look for information

- Time is of the essence ~ waste as little as possible

- If at first you don't succeed… offer help?

- The more local the map, the more likely to find the street and the house ("search" is not always the answer)

- and yours are . . .

IPGems

How easy is it to use the resources?

- Performers will not have the opportunity to learn how to use the interface, so keep it simple!

- Reflect the navigational language they already know

- Use common controls for common actions, no matter what the course or application used

- Make sure that changes to controls are reflected on all screens to maintain consistency

- and yours are . . .

IPGems

How can record-keeping and scoring be managed?

- The show must go on ~ don't let scoring get in the way of access to content

- Make scoring and usage data available to outside programs, so the EPSS will know the user's history and anticipated skill level

- Think about how the EPSS can be used to review performance, both inside and outside the CBT

- and yours are . . .

IPGems

A Few Comments on Technology

- Structure and storage of application files

- Structure and storage of content files

- Storage of usage records and scoring files

- Maintaining multiple versions of content

The Value Equation

Real Value

(supporting effective task completion)

+

Perceived Value

(encouraging on-going, rather than one-off, use)

=

Long-Term Benefit

(personal *and* organizational)

A Final Thought: What about PCD ?

- PCD = Performance-Centered Design

- Support is built in to the way an application and its interface works

- PCD often requires tighter context integration of topics and presentation approach

- Integrated use requires integrated design approaches

Performance Support '99 ~ Session 520

The End

~

Questions ?

Duane Degler
Performance/Information Consultant ~ IPGems
www.ipgems.com