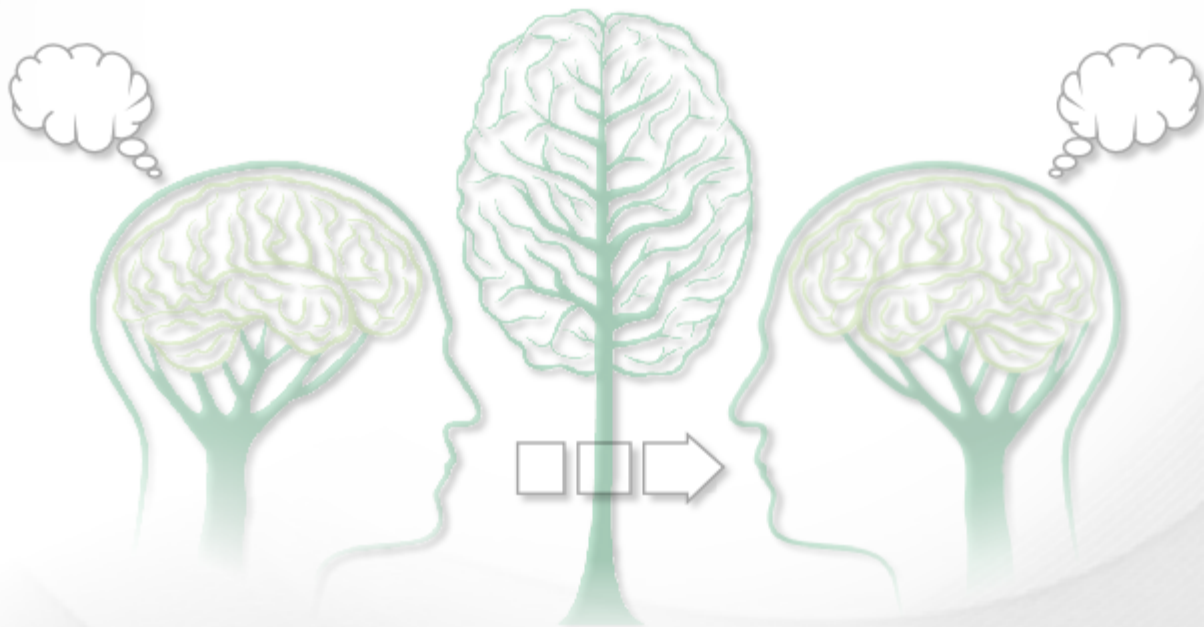


**A brief presentation
of work by
Christian Winters
in the Art & Science of
Training Development (T&D),
Instructional Systems Design (ISD),
and Instructional Media**





Near a lifetime of education and training to be productive and useful



Updated workplace knowledge acquired, applied, and passed on



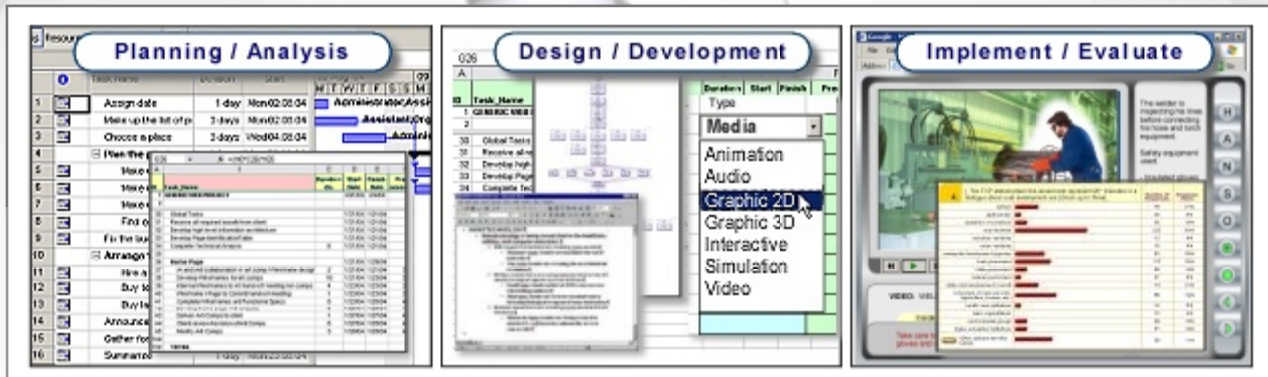
Instructional intent is the same though communication evolves



How to do one
one of the oldest
jobs in history.

How to adjust L-6
industrial welder
for joints & seams

To convey knowledge of tasks & technology relative to one's time.

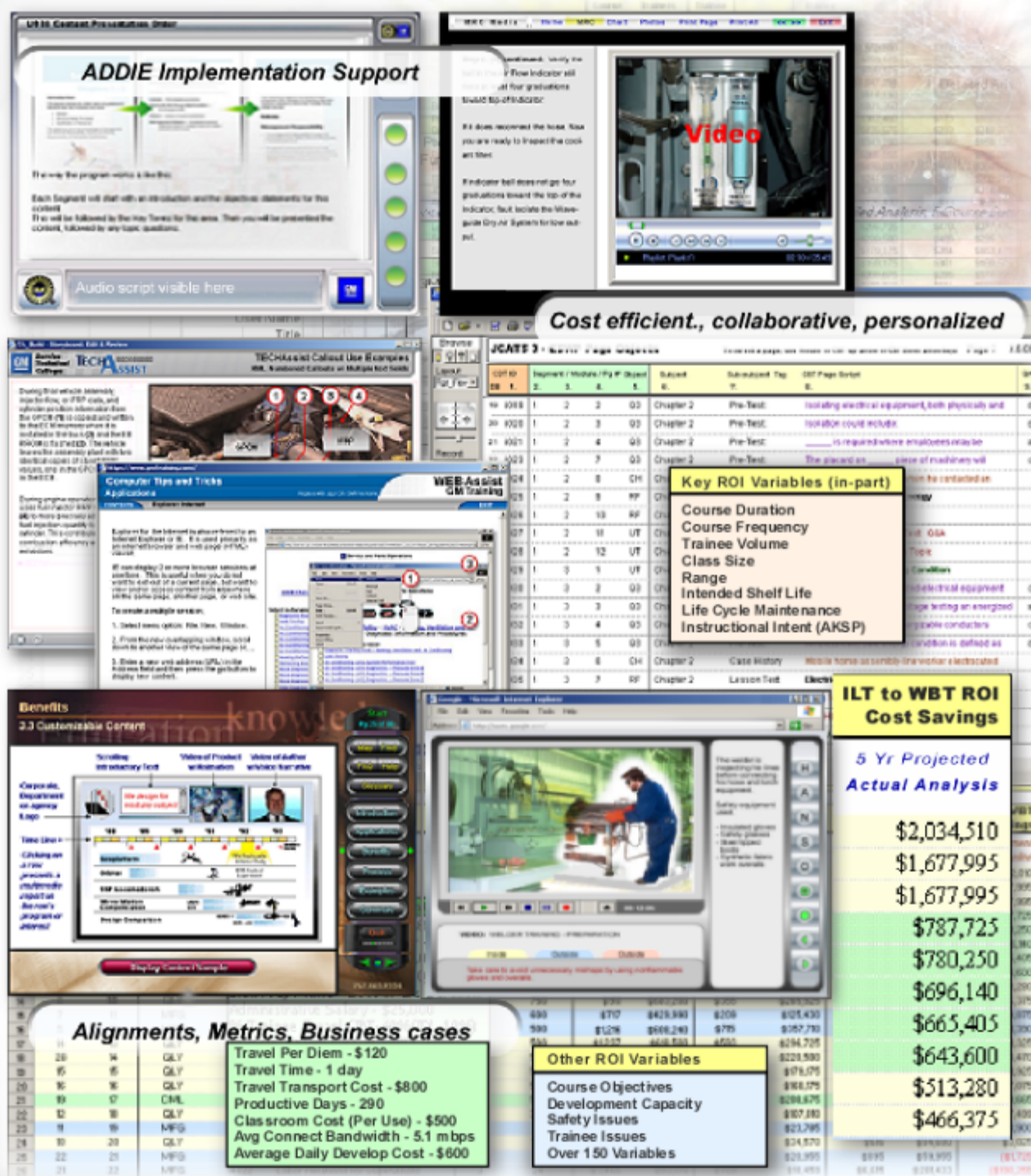


"Middle-ware" and Flex-Skills T&D / ISD P-ADDIE Project & Task Support Planning - Analysis, Design, Development, Implementation, Evaluation Instructional Media - Source to Deliverable for Show & Tells



- 1 - On / Off site photo & video shoot & edit
- 2 - High or low cost media production support
- 3 - Workplace environment sound capture & edit
- 4 - Workplace process competency image capture & edit
- 5 - Training Development (T&D) design documents & content
- 6 - Training content mapping for data-integrated ISD coordination
- 7 - Subject Matter Expert (SME) remote & on-site work knowledge capture & edit

Curriculum and course content databases, maps, and data models developed for multiple uses in Instructional Design (ISD), Training & Development (T&D), and Content Management. Tools and tasks assist for Web Based Training (WBT), Job Aids, Performance Support, and Knowledge-bases.



Collaborate with your existing personnel, technologies and tools OR a blend with my tools.
Work-site relevant content and media developed and presented for skills training & assessments.

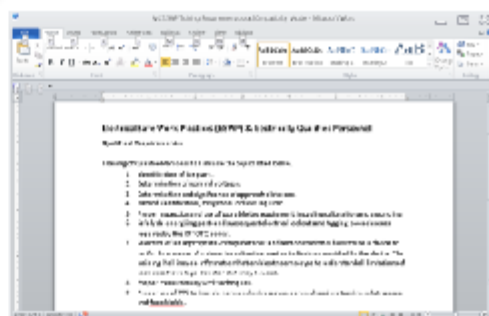
T&D / ISD Support / 810.643.1334

Start by worker training, job aids, skills testing needs & ROI assessments.

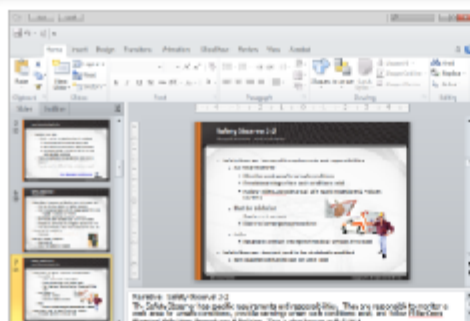
Establish data driven rationale to select objectives for design and development OR start a rapid-build to serve urgent needs.

1

2



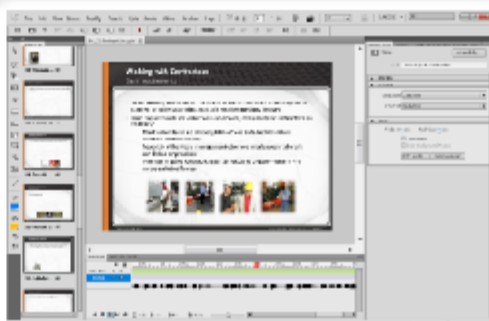
Outline instructional objectives, subjects, and topics aligned to meet requirements, financial concerns, organizational goals.



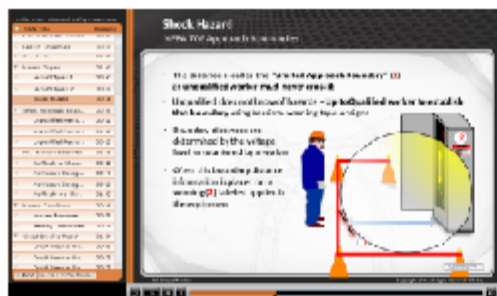
Advance outline to visual programmed storyboard. Add knowledge assessment Q&As, audio script, interactive objects, etc.

3

4



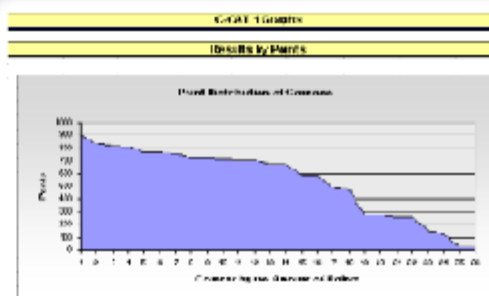
Advance storyboard as programmed published course and job aid product with menu, audio, video, interactive objects.



Published for delivery by a Learning (Content) Management System (LCMS or LMS) or training management tool.

5

6



Post-publish assessments of curriculum, course, and job aid user effectiveness. Determine actual ROI and adjust to needs.

Most customers and end-users see the results of T&D / ISD.

A relative few appreciate the integration of diverse efforts to create them.
One way to acquire favorable T&D / ISD ROI is by use of a client-adapted database

ucodemo_v04a Datatrium last

Home Cluster **P-ADDIE** Planning Analysis Design Develop Implement Evaluate **Help** Logout

Concept Interface & Screens Control Panel

Concept Model Orientation
Application Overview


WHAT is a

Performance Measurement Criteria (PMC) to Learning Object (LO) Content Map

This systems oriented Training & Development (T&D) and Instructional Design (ISD) database enables collaborative exchange, distant and/or onsite, to cost-effectively define and evolve PMCs to Learning Objects (LO). Results are user-friendly curriculum and course content maps and data tables.

WHY It Exists

Maps consolidate what content is, show build & budget status*, why & were used, how built, and when reviewed and ready.





*Good data in = good data out

T&D / ISD practice of Planning, Analysis, Design, Development, Implementation & Evaluation (P-ADDIE) relative to PMC-to-LO development are semi-integrated via database model and assisted support.

WHEN It Can Be Used

Anytime, anywhere via PC & web connection. After reviewing **Help**, click "**Cluster**" menu to start with an associated PMC group.

Click on any cluster symbol to view related development data or globe to show all

HOW It Is Used

An ISD task start set is sectorized in a workflow to 1. ID PMCs, 2. Define & build as LOs w/ associated text & media, 4. Review data. Screens, reports, printouts, file exchange serve as informative maps.

WHERE It Can Be Used

ISDs & Subject Matter Experts (SMEs) start a build, review, edit & status of relevant LOs, Clients, Vendors & Managers can review content. Media, Developers, Programmers, Trainers use as task guides, etc.

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150 Browse

T&D / ISD P-ADDIE functional prototype database (DB) to consolidate and coordinate curriculum and course content analysis and development info with one-source data entry, search, edit, & reports. Helped rationalize separate ISD DB initiative and corporate patent filing 20060024655 since abandoned with emergence of open source ISD DB solutions and practices.

Prior to 2006 few databases existed to consolidate data related to:
ISD Analysis, Design, Development, Implementation, Evaluation (ADDIE)

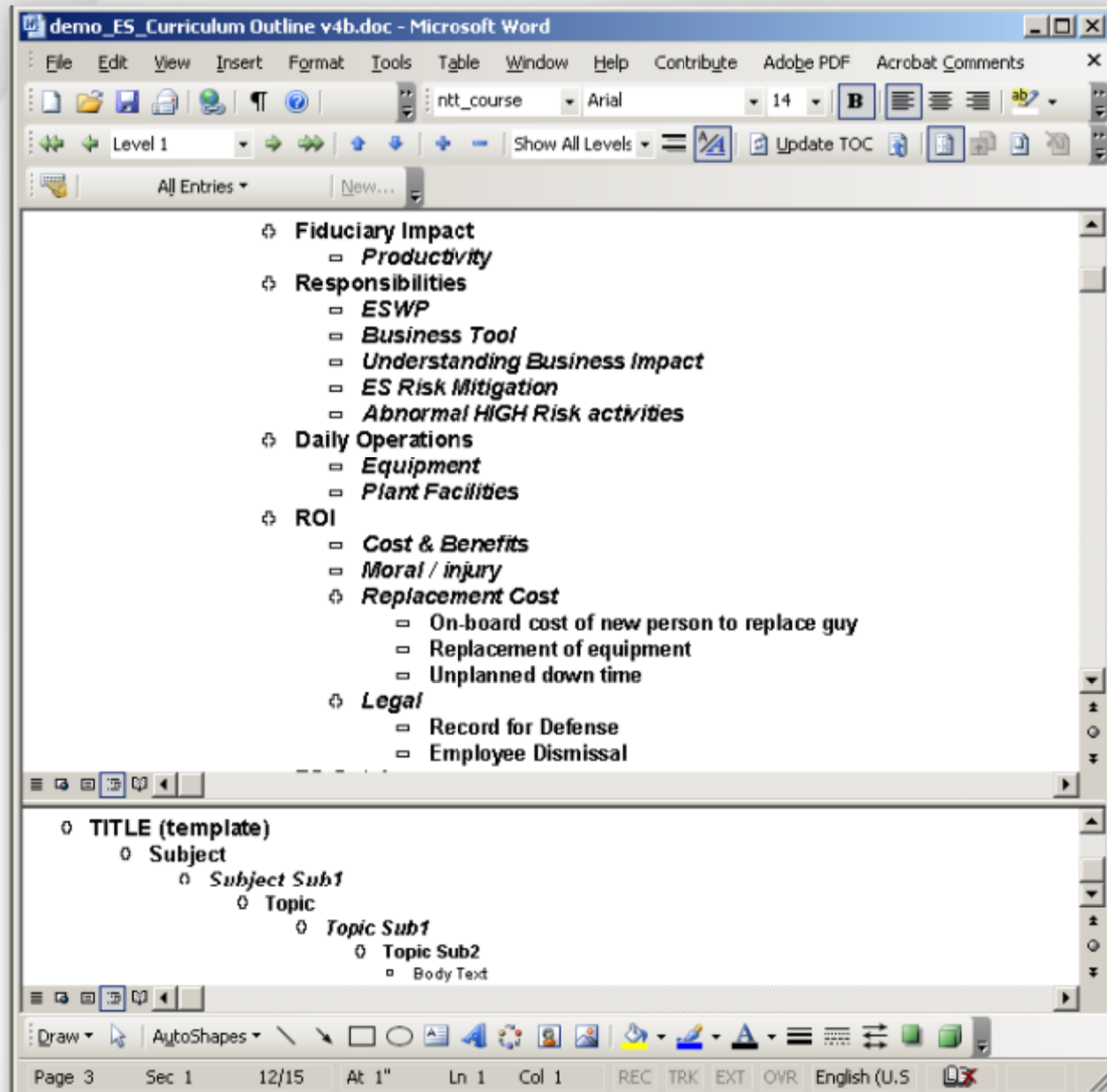
The top screenshot shows the 'Implement' tab of the 'ucodem_v04a Datatrium last' database. It features a 'Preview Content Display' form with fields for 'No.', 'Record', 'Notes - Client', 'Notes - Production', and 'PMC'. A large red '3' is overlaid on the form.

The bottom screenshot shows the 'Design' tab of the same database. It features an 'A/V Media Reference' table with columns for 'No.', 'ID Record', 'Date/Time: In / Last Edit', 'Owner', 'Use As', 'Diff.', 'Type', 'Stat: A/V', and 'Source file name: A/V'. The table contains four records, each with a large red number (1, 2, 3, 4) overlaid on the right side.

No.	ID Record	Date/Time: In / Last Edit	Owner	Use As	Diff.	Type	Stat: A/V	Source file name: A/V
1	00001	1/28/2009 11:11:38 PM / 2/11/2009 10:24:33 AM	csw	other	3	jpg	0 1	fmp_test01-ga01.gif
2	00002	1/28/2009 11:11:56 PM / 2/11/2009 9:31:55 AM	csw	2 part	2	jpg	0 2	fmp_test01-ga02.gif
3	00003	1/28/2009 11:12:07 PM / 2/11/2009 9:32 AM	csw	multi-part	3	gif	0 1	fmp_test01-ga03.gif
4	00004	1/28/2009 11:12:39 PM / 2/11/2009 10:23:18 AM	csw	stand-alone	1	swf		fmp_test01-ga04.swf

ISD database forms display text & image content as Learning Object (LO) data records associated w/ visual assets. Variations adapt to unique concerns of client.

ISD tool that enables rapid Subject Matter Expert (SME)
knowledge capture of subjects such as workplace policies & processes



ISD tool used to rapidly define and develop nationally distributed
ILT / WBT / and blended worker safety courses and service technician job aids

ISD tool enables rapid "learning content" ROI assessments Variant used for Instructor Led to Web Based Training (WBT) conversions

Microsoft Excel - C-CAT_Course Assess Tool w-Tutor 02.xls

File Edit View Insert Format Tools Data Window Contribute Help Adobe PDF

Type a question for help

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F30 =IF(E30="N",5,IF(E30="Y",1,"0"))

C-CAT 1 Courseware Conversion Assessment Results

Legend: Mo. - Placement of course, College/CTIS/Course Title - Course ID, Full# - Course Full# for course, ITL - Individual or Team Learning, AKSP - Awareness, Knowledge, Skill or Psychomotor Skill Development, OSE - Other, Dura - Duration in hours, Freq - Delivery frequency per year, Val - Audience volume per year, Size - Average size of class, Fee - Course cost, Range - Distribution (Local to Global), ISL - Intended Skill Life in year, LGI - Life, Paints - Drop Criteria: 1 value - 25 points, Delivery Data: 1 value - 20 points, Weight Factor: 1 value - 20 points, Paint Value: 2 or (-2) in column value, # Paints: Accumulative points per course, Group - Supported Course

Course Identification			Drop / Alternate Options Criteria				Delivery Data Criteria						Life-Maint		Other									
Group	ID No.	Course Title	Full#	ITL	AKSP	OSE	Group 1 Mater	Dura	Freq	Val	Size	Fee	Range	ISL	LGM	Group 2 & 3 Mat								
Weight Factor (1pt 4th-24th)								10	2	2			2											
ENTER 1-5 VALUES IN DARK RED COLUMNS ONLY			Delivery Data Range >>					Hi	14	16	500	133	360											
								Lo	1	2	99	5	50											
			Average					6	7	221	24	165												
D	D	User Data Entry Points - "D"	B	C	B	C	B	C	B	C	B	C	B	C	B	Optional								
PRD	7464	Production Fundamentals	M	S	I	S	AK	4	5	Awareness & Know.	3	4	16	5	300	5	21	240	2	Global	5	5	5	
PRD	3472	Production Throughput Overview	M	S	I	S	SW	5	2	Software	4	5	16	5	300	5	21	150	1	Global	5	5	2	
PRD	3591	Troubleshooting Plant Machinery	M	S	I	S	AK	4	2		4	5	16	5	300	5	21	150	1	Global	5	5	2	
LHE	7450	Small Press Linear	M	S	I	S	A	5	3		3	5	8	3	200	3	25	240	2	Global	5	5	2	No activity in 99 (proj)
FAB	3542	Mater Compartment Marriage	M	S	I	S	AK	4	4		3	4	16	4	250	3	25	210	2	Region	3	3	2	
FAB	7420	Outer Panel Line	M	S	I	S	A	5	3	Exposure to customer	1	5	10	4	200	3	25	50	1	Region	3	3	2	
LHE	7465	Unit LE Linear	M	S	I	S	K3	2	3		4	5	10	4	250	3	25	210	2	Global	5	5	2	
PRD	3493	Matrix System Applications	M	S	I	S	AK	4	3		4	5	5	2	150	2	20	150	1	Global	5	5	1	
PRO	7764	Lift and Load	M	S	I	S	AK	4	3		4	5	3	1	400	5	120	200	2	Region	3	4	2	
LHE	9151	Component Transfer	M	S	I	S	K	3	3	Knowledge	2	5	6	2	200	3	25	160	1	Global	5	3-5	2	
LHE	7467	Heat Dispersion Linear	M	S	I	S	K3	2	2		4	5	10	4	250	3	25	75	1	Global	5	3-5	2	Limited '99 activity
FAB	5631	Underbody Subsystem	M	S	I	S	AK	4	4		2	5	2	1	10	1	5	50	1	Global	5	5	2	
PRD	4011	Automated Lift	M	S	I	S	AK	4	2		4	5	5	2	150	2	20	150	1	Nation	4	5	3	Replaced dur ISO 2000
PRD	3314	SAE System Applications	M	S	I	S	K	3	3		4	5	4	2	100	2	25	120	1	Nation	4	3	3	
PRD	6412	Rabator Application	M	S	I	S	SW	5	2		12	3	2	1	90	1	40	90	1	District	2	5	1	
PRD	3404	Process Control Overview	M	S	I	S	AK	4	2		3	4	3	1	90	1	27	150	1	District	2	5	1	
PRD	3314	Coordinate Measurement Overview	M	S	I	S	K3	2	2		12	3	2	1	90	1	40	100	1	Local	1	5	3	
LHE	7070	Large Press Linear	M	S	I	S	K3	2	2		14	2	2	1	90	1	40	100	1	Local	1	3-5	2	Projected for 2000
LHE	3439	Blasting Linear	M	S	I	S	S	1			0	0	0	0	0	0	0	0	0					No activity in 99 (proj)
PRD	3312	Internal Auditing of Process	M	S	I	S	S	1			0	0	0	0	0	0	0	0	0					CoDI, AD-1, AV-1
FAB	4022	Lay Down Body Side	M	S	I	S	P	5			0	0	0	0	0	0	0	0	0					
PRD	2395	Nine Tools for Quality	M	S	I	S	P	5			0	0	0	0	0	0	0	0	0					
FAB	5055	Front Door Assembly	M	S	T	1		0			0	0	0	0	0	0	0	0	0					
FAB	4230	Quarter Panel Sub-Assembly	M	S			0	0			0	0	0	0	0	0	0	0	0					
FBI	3549	Leadership Mater	Y	1			0	0			0	0	0	0	0	0	0	0	0					No activity in 99 (proj)
FAB	701	Rear Door Assembly	Y	1			0	0			0	0	0	0	0	0	0	0	0					

Above is a partial sample of ROI ranked courses out of 230 total assessed in six weeks by 2 ISDs. Top 10 business cases prepared with 4 selected to convert from ILT to WBT by a cost effective "Go Fast" build model.

0. C-CAT Intro / 1. Help / 2. Contacts / 3. Notes / 4. C-CAT1 Criteria / 5. C-CAT1 Data / 6. C-CAT1 Graph / 7. C

Draw AutoShapes

Ready

Ranked results for large corporate university identified \$14.7 mil. in training savings. Enlarged wall mounted poster print enabled curriculum managers view & discussion.

ISD tool for curriculum skills competence and course mapping

Variant below depicts manufacturing training curriculum development

Microsoft Excel - amc_map curriculum 01b.xlsx

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A37 35

	A	B	C	D	E	F	G	H	I	J	K	L
	No.	ID	Course Subject	#Tpe	Topic	#Seq	LOs / Competencie	Meas?	QA	HandsOn?	Tools	Time
3	1	00001	2D MasterCAM (Mill, Lathe or both)									
4	2	00002	3D MasterCAM (Mill, Lathe or both)									
5	3	00003	5S/Visual Workplace	1	Introduction	1	Lean manufacturing con	N	5S/Visual Workp	Y	w/ clips and storage ID markings	
6	4	00003	5S/Visual Workplace	1	Introduction	2	Define, Measure, Analyz	Y		Y	N	
7	5	00003	5S/Visual Workplace	1	Introduction	3	Improves workplace; saf	N		Y	N	
8	6	00003	5S/Visual Workplace	1	Introduction	4	5S/Visual Workplace cor	Y	A 5S/Visual Work	Y	signs, markings	
9	7	00003	5S/Visual Workplace	2	History	5	Introduced and perfecte	N		N	N	
10	8	00003	5S/Visual Workplace	3	Sort / Sort	6	Sort through tools, mate	Y	Select Japanese	Y	gs, hammer, screwdriver	
11	9	00003	5S/Visual Workplace	3	Sort / Sort	7	Keep only essential - dis	Y		Y	N	
12	10	00003	5S/Visual Workplace	4	Seton / Straighten	8	Create ordered workplac	Y	Which of these is	Y	N	
13	11	00003	5S/Visual Workplace	4	Seton / Straighten	9	Systemically arrange for	Y		Y	gs, hammer, screwdriver	
14	12	00003	5S/Visual Workplace	5	Seiso / Shine	10	Clean and neat workplac	Y		Y	N	
15	13	00003	5S/Visual Workplace	5	Seiso / Shine	11	End of shift restore.	N		Y	N	
16	14	00003	5S/Visual Workplace	6	Seiketsu / Standard	12	Housekeeping standard.	N		N	N	
17	15	00003	5S/Visual Workplace	6	Seiketsu / Standard	13	Everyone knows their ro	Y	Term that means	Y	, responsibilities, contact info	
18	16	00003	5S/Visual Workplace	7	Shitsuke / Sustain	14	Sustain discipline to mai	N		N	N	
19	17	00003	5S/Visual Workplace	8	Examples	15	Color, shapes, outlines i	Y		Y	arksite marking exampes	
20	18	00003	5S/Visual Workplace	8	Examples	16	Tool pegboard with outli	Y		Y	w/ clips and storage ID markings	
21	19	00003	5S/Visual Workplace	8	Examples	17	5S posted practice remi	N		Y	S orientation board	
22	20	00003	5S/Visual Workplace	9	Summary	18	(V/rp)	N		N	N	
23	21	00004	Activity-Based Costing									
24	22	00005	Advanced Product Quality Planning	1	Introduction	1	Standard process guide shared by suppliers and purchasing comp				gauges	
25	23	00005	Advanced Product Quality Planning	2	Pre-source	2	Stakeholder meeting, Rf	Y		Y		
26	24	00005	Advanced Product Quality Planning	2	Plan and Define Program / Plan	2	Scope project, team size	Y		Y		
27	25	00005	Advanced Product Quality Planning	3	Product Design and	3	Design reviews & workst	N		N		
28	26	00005	Advanced Product Quality Planning	4	Process Design and Development / Do-2	4	Design reviews & lesson	N		N		
29	27	00005	Advanced Product Quality Planning	5	Product and Proce	5	Advanced production, e	N		N		
30	28	00005	Advanced Product Quality Planning	6	Production Launch, Feedback Assessment and Corrective / Act	6	Supplier updates docum	N		N		
31	29	00005	Advanced Product Quality Planning	7	Understanding customer needs	7	Checklist to systematic	Y		Y		

Map AMC Trng. Curriculum

Draw AutoShapes

Ready

Data map provides curriculum; build, search, sort, report, for metrics / calculations

ISD tool enables course content mapping

Variant used to ID content sequence with developer & client build feedback

Microsoft Excel - Map Course ALC Finance v06a cw_ttv.xls

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A1 ALC Curriculum Content Map

ALC Curriculum Content Map

Note: 1. Find & Sort common values and sequence by using filter buttons. 2. Collapse or expand row height to show / hide all data by selecting all rows: select Menu "Format, Cells" then Tab "Alignment" and check or uncheck "Wrap Text". Print by 1st selecting Menu "File, Print Preview" to check output print.

In-Out (I / O) = I-In, g-graphic, n-need

No.	Course	Section	Title	Src Define	I / O	Notes ALC	Stat	Do	Mo
1	Basic Finance	Course Entry	ALC Basic Finance	Repurpose	n				re
2	Basic Finance	Orient	Copyright Notice	Repurpose	i	Embed on previous page			ye
3	Basic Finance	Orient	Help - Navigation	Repurpose		No required. Perhaps bury in help button with return?			pe
4	Basic Finance	Resources	Resources: Presentation as Job-Aid	cw		Place at end			pe
5	Basic Finance	Resources	Resources: MedChoice Contacts	tv	i	Place at end			pi
6	Basic Finance	Course Intro	Course Introduction	Team ID	i				gli
7	Basic Finance	Course Intro	Course Objectives	Team ID	i	Can we combine with course intro			gli
8	Basic Finance	Region & Clinic ID	Region & Clinic Identification (ID)	Team ID	i				mi
9	Basic Finance	Region & Clinic ID	Objectives	Team ID	i				gli
10	Basic Finance	Region & Clinic ID	Case Example	Team ID example	i				pe
11	Basic Finance	Region & Clinic ID	Introduction			Place in front of case and use to set case up.			
12	Basic Finance	Region & Clinic ID	How to ID Clinic Region	Team ID					
13	Basic Finance	Region & Clinic ID	How to ID Clinic Number	Team ID					
14	Basic Finance	Region & Clinic ID	Summary	Team ID					
15	Basic Finance	Client Welcome	Client Welcome	Team ID	n				cc
16	Basic Finance	Client Welcome	Objectives	Team ID	n				fir
17	Basic Finance	Client Welcome	Case Example						
18	Basic Finance	Client Welcome	Introduction			Place in front of case and use to set case up.			
19		Client Welcome	Content						
20	Basic Finance	Client Welcome	Summary						
21	Basic Finance	Pre-Treatment Asses	Pre-Treatment Assessment	Team ID - TV	i	May need to delete this segment. Boss does not see need. More a part of sales			pr

Map / Notes-QAs / Reserve /

Draw AutoShapes

Ready

Data provides course design and development editing and content status tracking

ISD tool enables course content mapping

Variant used to guide then semi-automate course content programming (actual)

Microsoft Excel - Map Course NTT Sim Eswp v08m.xls

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A9 i001

	A	B	C	D	E	F	G	H	I	J
1							ESVP Audio/Text Script - Based on Handbook Vers. 8f			
2										
3	Notes:									
4										
5										
6										
7	No.	Seq	Mod	Pg	Subject	Sub-Subj	Script: (Handbook text as scene description)	QA	Pos	
8	i001	0	0	i-0		Enter Course: ES/WP	Cover			N
9	i002	0	0	i-1	Welcome	Intro: Course Welcome	Welcome to the ES/WP Handbook i-Guide. This instructional program was developed by the UAW-GM Center for Human Resources. It reflects the joint efforts of the integration of the United Auto Workers and General Motors Corporation to provide a safe and healthy work environment for all qualified and unqualified UAW-GM electrical workers.			R
10	i003	0	0	i-2	ES/WP Handbook i-Guide Subjects Presented	Intro: Course Topics	The topics covered in this program include: <ul style="list-style-type: none"> Electrical Safe Work Practices Policies Electrical Safety Principles Qualification of Personnel Planning of Electrical Work Personal Protective Equipment (PPE) PPE Inspecting and Maintenance PPE Personal Safety Grounding PPE Voltmeter and Ammeter Use Troubleshooting Bus Plug-in Units and Busway and <ul style="list-style-type: none"> Conduit and Wireway Installation 			L
11	i004	0	0	i-3	Handbook Content and Placement	Intro: Content List	In the front of the ES/WP Handbook is a Table of Contents, Figures Table, and the section may also include a Standards Reference Table. A glossary of terms and definitions is in the back following the main content. The handbook is comprised of 3 subject segment areas.			R
12	i005	0	0	i-4	UAW-GM ES/WP Handbook & i-Guide Availability	Intro: Availability	The handbook is available through UAW-GM Center for Human Resources in hardcopy, electronic media, and interactive orientation program or ES/WP i-Guide.			T
13	i006	0	0	i-5	UAW-GM Authorship Notice	Intro: UAW-GM Agreement	The UAW-GM Collective Bargaining Agreement provides for far-reaching and expanded protection in the area of workplace Health and Safety. The successful implementation of the Electrical Safe Work Practices (ES/WP) Program is only one aspect of the responsibility to provide a comprehensive safety program. This program includes the minimum guidelines that shall be implemented at every UAW-GM facility.			R
14	i007	0	0	i-6	UAW-GM Employee Right & Responsibilities	Intro: Employee Right & Responsibility	Additionally, it is every employee's right and responsibility to receive the required training to follow established local procedures, and to seek the counsel of local leadership in the event a situation occurs which the employee believes may violate this policy.			R
15	i008	0	0	i-7	Case History Notice	Intro: Case Histories	This ES/WP i-Guide includes a periodic examples of electrical work related incidents as recorded by the US Department of Health and Human Services, Center for Disease Control and Prevention. It is hoped that this training in the use of the			T

Course Cases Q&A-1 Q&A-2

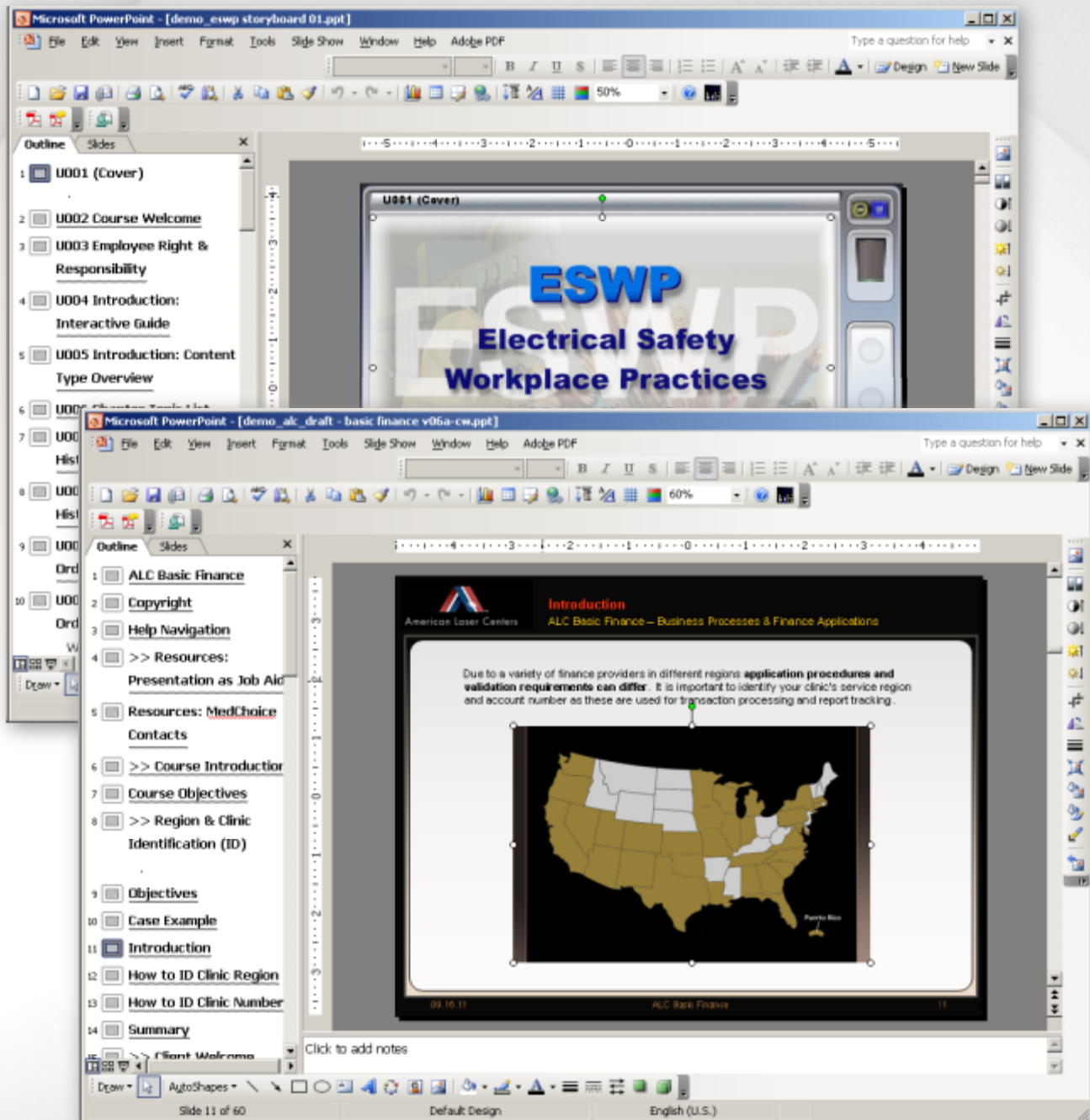
Draw AutoShapes

Ready

Course build content map for ISDs, SMEs, instructors, media talent and programmers

ISD tool for storyboarding pre-program content build / review / edit sessions

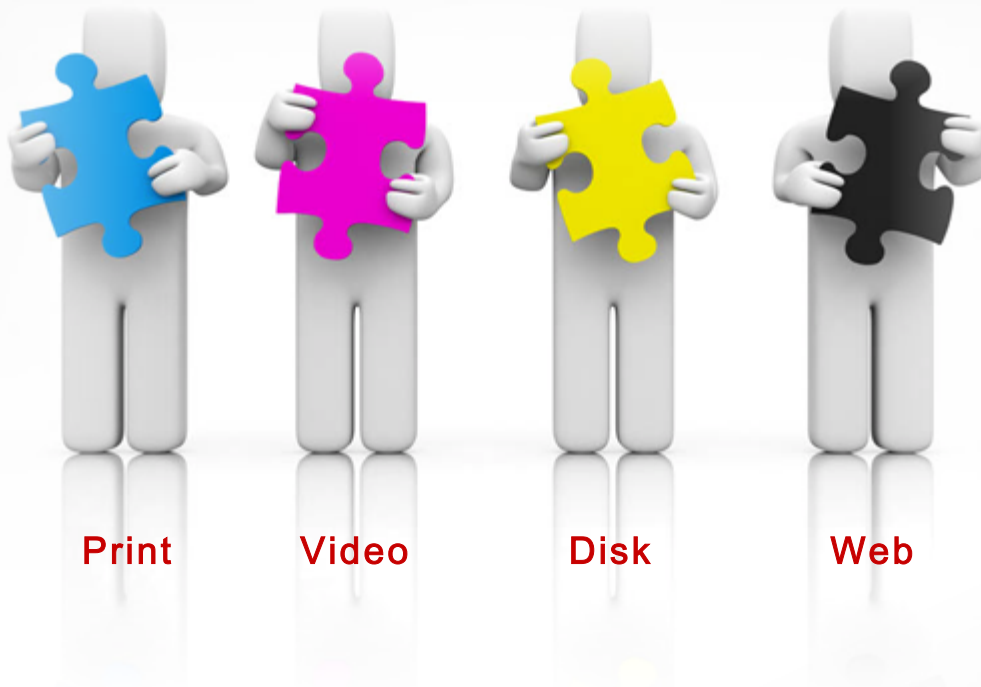
Variant used to create courses & job aids in corporate universities



Pre-Articulate PowerPoint CBT & WBT product process model w/ Flash interactives

Content is presented, reviewed, edited for delivery in select media.

**Content mapping and rapid prototyping
enables easy, accurate onsite & remote collaborations for:**



Print

Video

Disk

Web

**Production work in documentation, videos and interactive media and/or
corporate & industry standard (AICC, SCORM, etc.) compliant content output.**

**Designed, developed, and programmed in proprietary media models
and Learning Content Management Systems (LCMS)
for Computer / Web Based Training (CBT / WBT).**

**Seek opportunities in
technical documentation, Training & Development (T&D), instructional design (ISD)
information mapping, content mapping, eLearning and mobile learning production.**