



A Single Source Publishing Approach to Develop eLearning Content with DITA

A/Prof Lee Wee Leong
A/Prof Wong Yue Kee
Singapore University of Social Sciences




Agenda


- iStudyGuide
- iStudyGuide Workflow
- Challenges in Creation and Production
- Single Source Publishing
- What is DITA?
- Transformation to Multiple Output Formats
- SUSS schema
- Demo


iStudyGuide

- The Interactive Study Guide (iStudyGuide) contains detailed information on the course structure including the course overview, learning outcomes, assessment components, subject matter, as well as course introductory video, chunked lesson recordings, audio clips, formative assessments with feedback and more.
- It is designed to encourage students to interact with the subject through quizzes, activities, self-reflection and self-assessment.
- The content in the iStudyGuide is broken into bite-sized topics and organized into study units to be covered over the course of study.
- It enables students to learn at their own pace anytime, anywhere, even without network connectivity.
- It is accessible on multiple devices (i.e. desktop, laptop, tablet and smartphone) and across various operating systems (i.e. iOS, Android, Windows & Mac).

iBookstore



SEARCH IN 

LOGOUT 

Hello, wilee

HOME | MY CART | MY ACCOUNT | ADMIN

SCHOOLS & CENTRES

- Arts and Social Sciences
- Business
- S R Nathan School of Human Development**
- Science and Technology
- UC
- Centre for Continuing and Professional Education
- Learning Services
- Teaching and Learning Centre


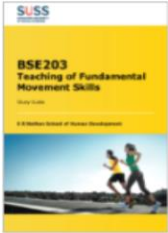
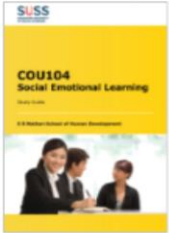


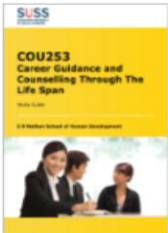
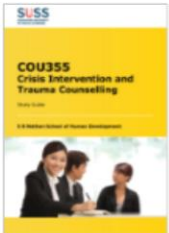

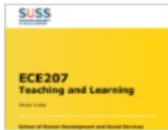



RELATED READINGS

- Case Studies
- eBooks

S R NATHAN SCHOOL OF HUMAN DEVELOPMENT

Sort By: | [Course Code](#) | [Rating](#) | [Title](#)

Search Results: 151 found Items per page: Go to page:

 <p>BAE103 Creative Drawing</p> <p>S R Nathan School of Human Development</p>	 <p>BSE203 Teaching of Fundamental Movement Skills</p> <p>S R Nathan School of Human Development</p>	 <p>COU104 Social Emotional Learning</p> <p>S R Nathan School of Human Development</p>	 <p>COU155 Counselling Children</p> <p>S R Nathan School of Human Development</p>
 <p>COU157 Counselling Adolescents</p> <p>S R Nathan School of Human Development</p>	 <p>COU253 Career Guidance and Counselling Through The Life Span</p> <p>S R Nathan School of Human Development</p>	 <p>COU355 Crisis Intervention and Trauma Counselling</p> <p>S R Nathan School of Human Development</p>	 <p>BMU203 Methods and Approaches - Kodaly</p> <p>S R Nathan School of Human Development and Social Sciences</p>
 <p>ECE207 Teaching and Learning</p> <p>S R Nathan School of Human Development and Social Sciences</p>	 <p>ECE213 Children's Mathematics, Science and Technology</p> <p>S R Nathan School of Human Development</p>	 <p>ECE303 Childhood and Society</p> <p>S R Nathan School of Human Development</p>	 <p>ECE353 Early Childhood Education</p> <p>Singapore University of Social Sciences</p>

iBookstore

SUSS SINGAPORE UNIVERSITY OF SOCIAL SCIENCES

Hello, wilee

SEARCH BUS201

HOME | MY CART | MY ACCOUNT | ADMIN

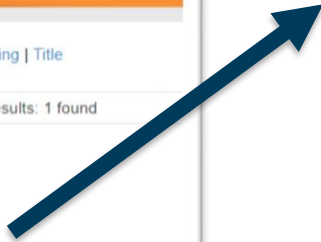
SCHOOLS & CENTRES

- Arts and Social Sciences
- Business
- S R Nathan School of Human Development
- Science and Technology
- UC
- Centre for Continuing and Professional Education
- Learning Services
- Teaching and Learning Centre

Sort By: | Course Code | Rating | Title





Search Results: 1 found

Contract and Agency Law



STUDYGUIDE



This course introduces students to the key topics of contract and agency law. Students obtain an overview of the Singapore legal system at the start of the course. The Contract Law topics cover the entire life cycle of a contract from formation to discussion of various types of terms present in a contract and their respective legal status, identification of vitiating factors which can undermine a contract, how a contract can be discharged and finally, how to obtain damages for breach of contract. The topic on Agency Law highlight key aspects of the agency relationship and the rights and duties imposed upon an agent. At the end of the course, the students will gain valuable insights as to how the contract, as a legal device, supports and facilitates business transactions.

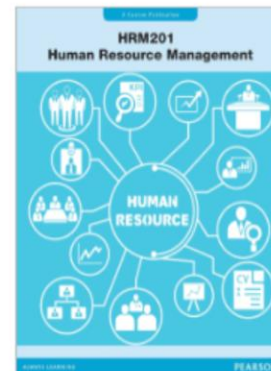
 HTML (19.71MB)	What's this?
 EPUB (20.41MB)	What's this?
 PDF (0.74MB)	What's this?
 ORDER PRINT COPY \$10.00	What's this?

[Report A Problem](#)


ADOPTED eTEXTBOOK

Human Resource Management, Pearson Custom Textbook

 LAUNCH eTEXTBOOK FOR THE COURSE	What's this?
 ORDER PRINT TEXTBOOK \$28.00	What's this?

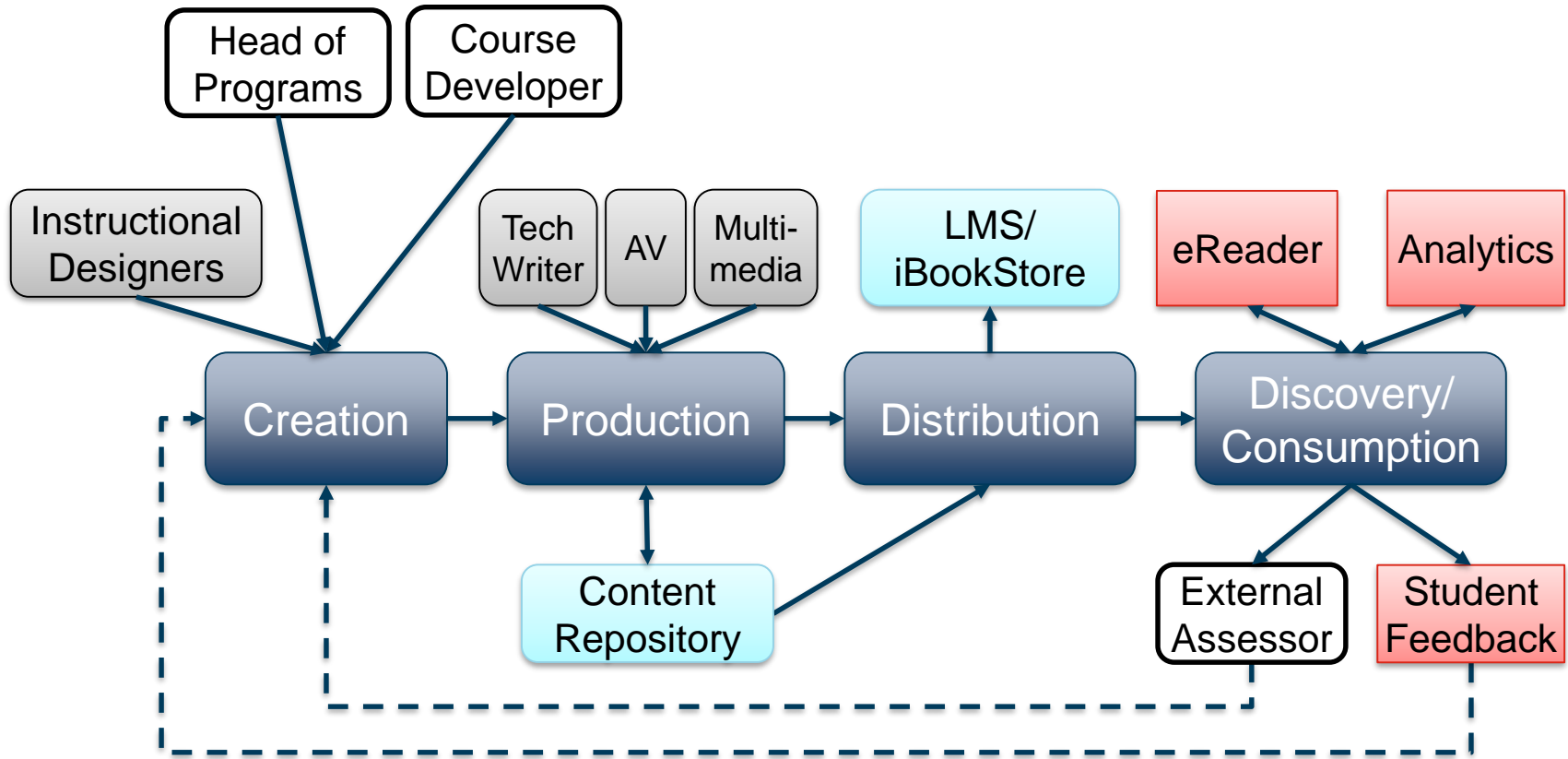


OTHER eTEXTBOOKS

 LAUNCH PAGE FOR ADDITIONAL READING	What's this?
--	--------------



The iStudyGuide Workflow



Challenges in Creation and Production

1. Short production timeline

- 50 new SGs per semester.
- 100 revisions per semester.
- Pile up towards the end due to content arriving late.

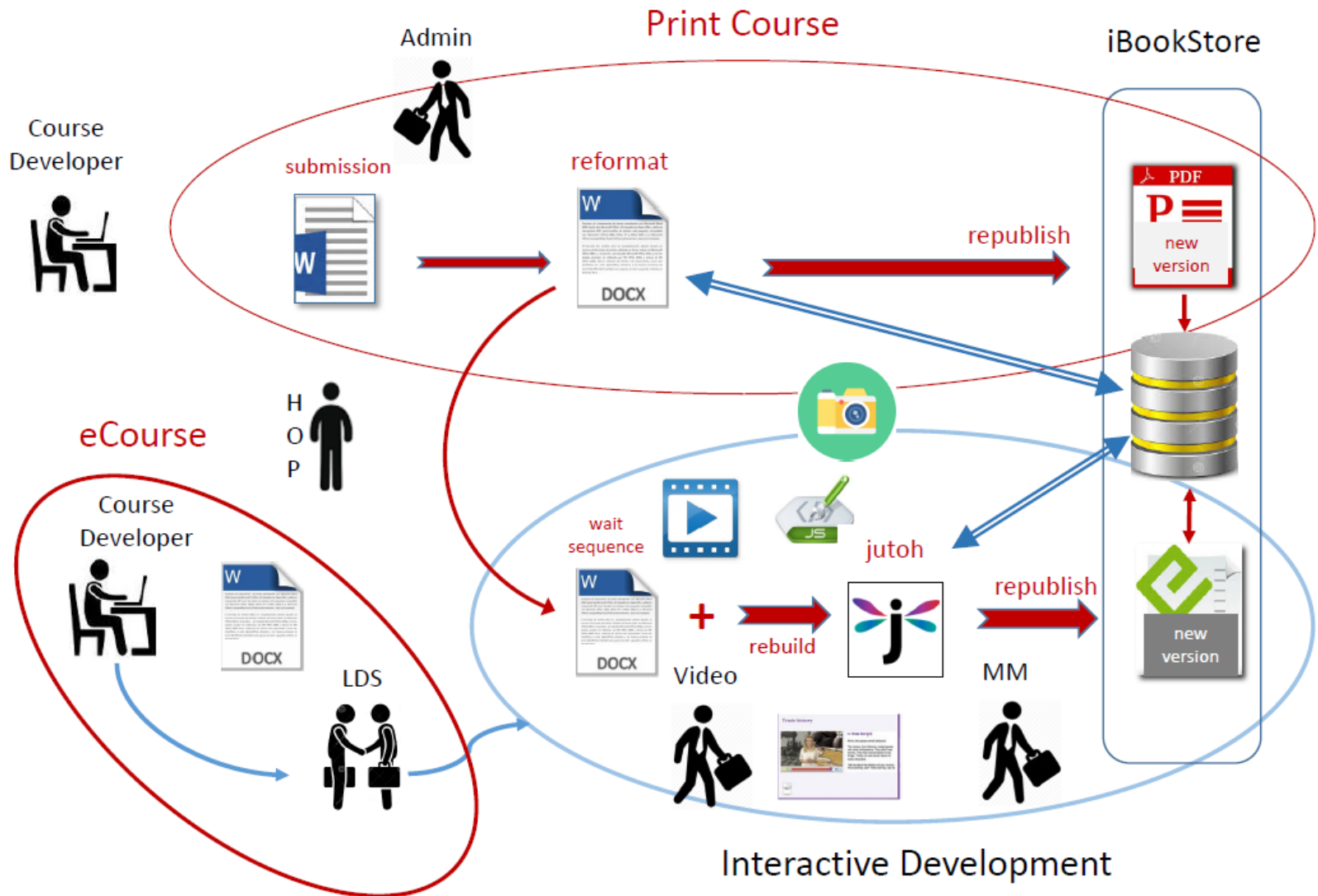
2. Functional segregation

(Instructional Designer, Multi-Media, TechWriter, AV) results in assembly line delays, duplication of effort. Not in my job-scope mentality... incomplete work... not end-to-end.

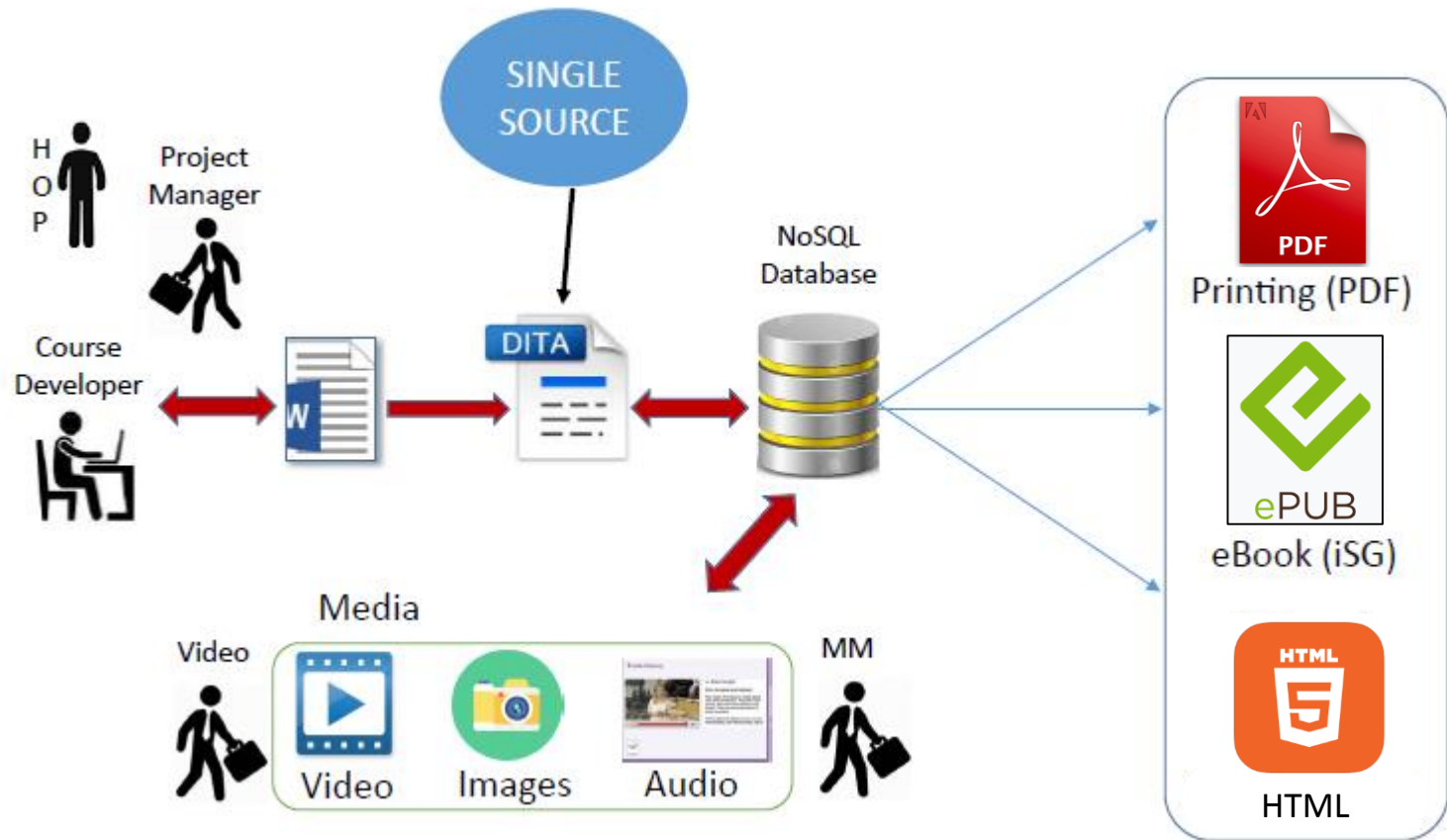
3. Print and e-course segregation - different developers, ID results in lack of a coherent output. Multiple formats added extra work.
4. Inconsistencies across different courses. Not just about fonts and format but also about structures.

2017 JAN SEMESTER	TERM 2 (PILOT TERM 2/17)	TOTAL (71) 32 courses (2) 21 courses
SBIZ (8) T1 1 ACC351 (P) - DIANE/EUIZ/JANE 2 ANL3174Y - DIANE/JOY/DAVID 3 ANL31914 - DIANE/JOY/DAVID 4 BUS356 - DIANE/JOY/DAVID - DITA 5 BUS371 - DIANE/JOY/DAVID 6 SIC343 - PABLO/JOY/DAVID 7 FIN381 - DIANE/JOY/DAVID 8 SEC309 - PABLO/EUIZ/JOY SASS (9) T1 9 ELT499 - LING/ANNA/ELIZ/JANE 1 CCS103 - ANNA (General) DAVID 2 FLM201 - PABLO/JOY/DAVID - JUL 17 3 PPT107 - ANNA/ELIZ/JOY/DAVID 4 PPT307 - ANNA/ELIZ/JOY/DAVID 5 TLL10 - LING/ANNA/ELIZ/JANE 6 TLL11 - LING/ANNA/ELIZ/JANE 7 TLL10 - LING/ANNA/ELIZ/JANE SS1 (6) T1 1 BMS211 - ANNA/ELIZ/JOY/DAVID 2 BUS355 - PABLO/JOY/DAVID - JUL 17 3 ACC225 - ANNA/ELIZ/JOY/DAVID 4 ACC225 - ANNA/ELIZ/JOY/DAVID 5 ACC225 - ANNA/ELIZ/JOY/DAVID 6 ACC225 - ANNA/ELIZ/JOY/DAVID 7 ACC225 - ANNA/ELIZ/JOY/DAVID 8 ACC225 - ANNA/ELIZ/JOY/DAVID 9 ACC225 - ANNA/ELIZ/JOY/DAVID	HISS (8) T1 1 BAE301 - JOY/ANNA/ELIZ/JOY/DAVID 2 BAE301 - JOY/ANNA/ELIZ/JOY/DAVID 3 BAE301 - JOY/ANNA/ELIZ/JOY/DAVID 4 BAE301 - JOY/ANNA/ELIZ/JOY/DAVID 5 BAE301 - JOY/ANNA/ELIZ/JOY/DAVID 6 BAE301 - JOY/ANNA/ELIZ/JOY/DAVID 7 BAE301 - JOY/ANNA/ELIZ/JOY/DAVID 8 BAE301 - JOY/ANNA/ELIZ/JOY/DAVID (CAPE) T1 1 GSP171 - ELIZ/ANNA/ELIZ/JOY/DAVID TERM 2 SBIZ (7) 1 ANL309 - DIANE/EUIZ/JOY/DAVID 2 ANL311 - DIANE/JOY/DAVID 3 BUS367 - DIANE/JOY/DAVID 4 BUS368 - ELIZ/ANNA/ELIZ/JOY/DAVID 5 FIN383 - DIANE/ELIZ/JOY/DAVID 6 FIN383 - DIANE/ELIZ/JOY/DAVID SAB2 (5) T2 1 CCS104 - ANNA/ELIZ/JOY/DAVID 2 FLM203 - PABLO/JOY/DAVID 3 FLM203 - PABLO/JOY/DAVID	SASS T2 1 SSC205 - CHOW/ELIZ/DANNY 2 SSC205 - CHOW/ELIZ/DANNY HISS (9) T2 1 BAE305 - JOY/ANNA/ELIZ/JOY/DAVID 2 BAE311 - JOY/ANNA/ELIZ/JOY/DAVID 3 BAE311 - JOY/ANNA/ELIZ/JOY/DAVID 4 BAE305 - JOY/ANNA/ELIZ/JOY/DAVID 5 BAE313 - JOY/ANNA/ELIZ/JOY/DAVID 6 COM304 - JOY/ANNA/ELIZ/JOY/DAVID 7 ECU23 - CHOW/ELIZ/JOY/DAVID 8 HRM203 - ELIZ/ANNA/ELIZ/JOY/DAVID 9 SNS362 - CHOW/ELIZ/JOY/DAVID OTHER PROJECTS 1. INLESTONS 2. LS WEBSITE

Challenges in Creation and Production



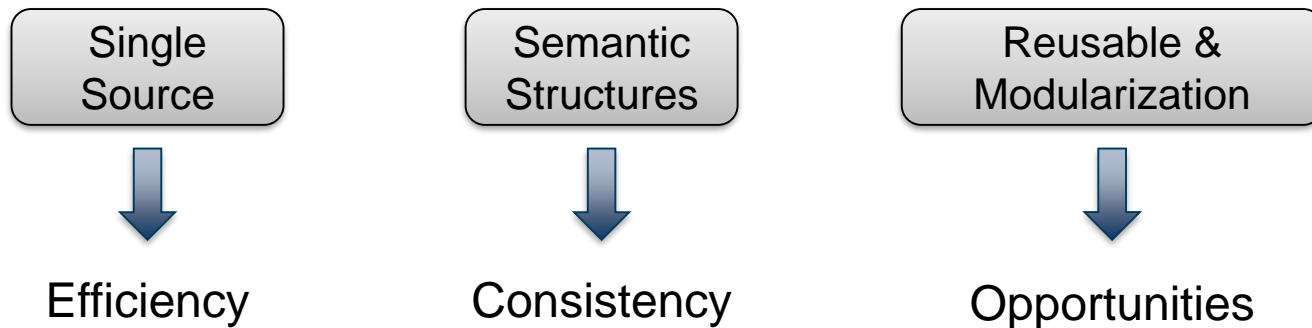
Single Source Publishing





Single Source Publishing

- Single Source **saves man-hours** and result in **less mistakes**.
- Output documents with **consistent look and feel** which will make it easier for learners to find the relevant materials quickly.
- **Output multiple formats**: for different devices, samplers and web output.
- Proven document architecture (adopted by many publishing enterprises) offers better document management.
- Promotes **reusable components** and **modularization**.
- Semantic framework offers deeper analysis and personalization





What is DITA?

- The Darwin Information Typing Architecture (DITA) is an XML-based, end-to-end architecture for authoring, producing, and delivering technical information.
- IBM originally developed DITA to more efficiently reuse content in product documentation.
- In an XML authoring environment, authors apply tags to define the meaning or purpose of the content, while stylesheets associated with the content automatically define the look-and-feel of the output.
 - For instance, three separate stylesheets can be created to control the way content appears in PDF, EPUB, and HTML respectively.
- As DITA creates structural consistency across topics in an information set, it also allows for automating and streamlining of internal processes, and at the same time producing higher quality content in our iStudyGuide in a cost-effective manner.

Editing is done with Oxygen XML editor

The screenshot displays the Oxygen XML editor interface. The main window shows the XML document 'SWK106_su1.dita' with the following structure:

```
1 <suss xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="urn:suss
2 <su id="SWK106_su1">
3 <title>Historical Perspectives</title>
4
5 <!-- Learning Outcomes -->
6 <lo id="SWK106_su1_lo">
7 <title>Learning Outcomes</title>
8 <para>By the end of this unit, you should be able to:</para>
9 <ol type="1">
10 <li>Describe the early approaches to social welfare in Britain and the United
11 States.</li>
12 <li>Relate an overview of the history of social work in Britain and the United
13 States.</li>
14 <li>Discuss how social work has evolved in the political, economic and social
15 contexts.</li>
16 <li>Describe the historical development of social work and social welfare in
17 Singapore.</li>
18 <li>Compare the development of social work in Singapore and in the West.</li>
19 <li>Discuss how political, economic and social conditions have shaped the
20 development of social work in the West and Singapore.</li>
21 </ol>
22 </lo>
23 <!-- End of Learning Outcomes -->
24
25 <!-- Overview -->
26 <overview id="SWK106_su1_overview">
27 <title>Overview</title>
28 <para>This study unit aims to provide a historical overview of the development of social
29 work profession and how the development had been shaped by the political, social and
30 economic context of the different societies. </para>
31 </overview>
32 <!-- End of Overview -->
```

The Data Source Explorer on the left shows a tree view of the project files, including 'SWK106' and its subfolders 'media', 'ver1_4_0', 'output', and 'source'. The 'source' folder contains several DITA files, with 'SWK106_su1.dita' selected.

The status bar at the bottom indicates the current file path: 'oxygen:/.../SWK106/ver1_4_0/SWK106_su1.dita', the user 'U+003C', the page number '1064 : 60', and a notification for '30 new message(s)'.

DITA Document has an XML structure

```
<title>Historical Perspectives</title>

<!-- Learning Outcomes -->
<lo id="SWK106_sul_lo">
  <title>Learning Outcomes</title>
  <para>By the end of this unit, you should be able to:</para>
  <ol type="1">
    <li>Describe the early approaches to social welfare in Britain and the United States.</li>
    <li>Relate an overview of the history of social work in Britain and the United States.</li>
    <li>Discuss how social work has evolved in the political, economic and social contexts.</li>
    <li>Describe the historical development of social work and social welfare in Singapore.</li>
    <li>Compare the development of social work in Singapore and in the West.</li>
    <li>Discuss how political, economic and social conditions have shaped the development of social work in the West and Singapore.</li>
  </ol>
</lo>
<!-- End of Learning Outcomes -->

<!-- Overview -->
<overview id="SWK106_sul_overview">
  <title>Overview</title>
  <para>This study unit aims to provide a historical overview of the development of social work profession and how the development had been shaped by the political, social and economic context of the different societies. </para>
</overview>
<!-- End of Overview -->

<!-- Chapter 1 -->
<chapter id="SWK106_sulch1">
  <title>Historical Development of Social Work</title>
  <para>Throughout the history of social work, the overall objective has consistently been to fulfil the social, financial, health and recreational voids left in a society.
```

Historical Perspectives

Learning Outcomes

Learning Outcomes

By the end of this unit, you should be able to:

1. Describe the early approaches to social welfare in Britain and the United States.
2. Relate an overview of the history of social work in Britain and the United States.
3. Discuss how social work has evolved in the political, economic and social contexts.
4. Describe the historical development of social work and social welfare in Singapore.
5. Compare the development of social work in Singapore and in the West.
6. Discuss how political, economic and social conditions have shaped the development of social work in the West and Singapore.

End of Learning Outcomes

Overview

Overview

This study unit aims to provide a historical overview of the development of social work profession and how the development had been shaped by the political, social and economic context of the different societies.

End of Overview

Chapter 1

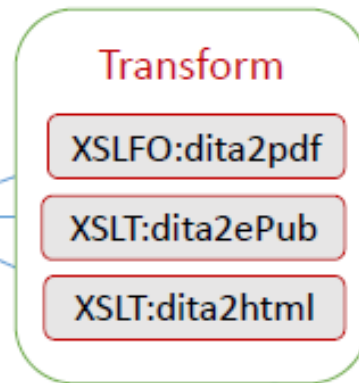
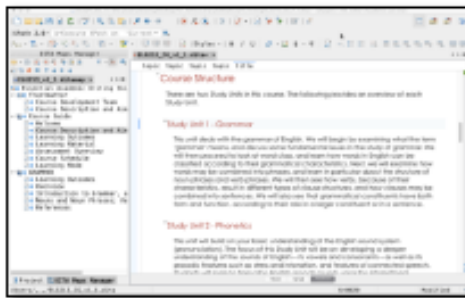
Chapter 1 Historical Development of Social Work

Throughout the history of social work, the overall objective has consistently been to fulfil the social, financial, health and recreational voids left in a society. The purpose of social work still holds true

Transformation to various format

1. Single Source

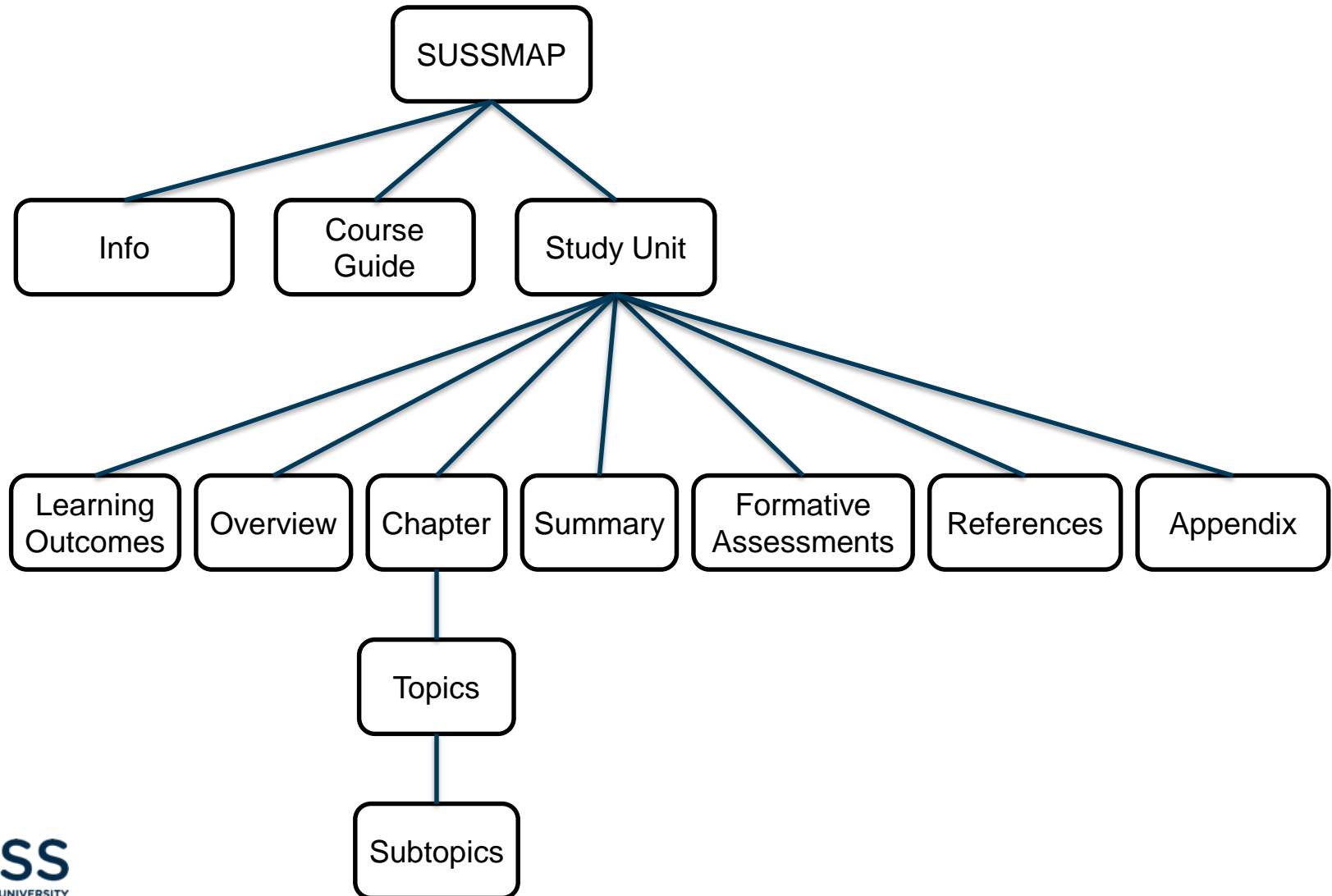
ELG213.dita



2. Format Independent
3. Semantic structure
4. Proven and accepted

Multiple
customizable
formats

SUSS SG_schema





Read

You should now read Wee, A. (2011). Concepts in context: Concepts are there to make learning easier. In K. K. Mehta & A. Wee (Eds.), *Social work in context: A reader* (2nd ed.). Singapore: Pearson Education South Asia, pp.83-91.



Reflect

In Singapore, the policy is to provide subsidies to ensure that the citizens have a decent standard of education, housing, health, job training / support. This is in contrast to other developed welfare countries where there are usually welfare payments, automatic cash allowances for the unemployed, state-funded pension schemes for the retired / elderly. What are some of the challenges for social workers with Singapore's approach towards social policy?

1.1.6 Three Models of Social Policies

Titmuss (1974) identified three different models to which social policies were classified. They are:

- **Institutional Redistributive Model**
 - An Institutional Redistributive Model social policy is one that will provide subsidised services to the society as a whole, including both tax-payers and beneficiaries which are deemed socially desirable and beneficial to all. The services may be financed through taxes and the subsidies are administered to all who require the services.

- Healthcare, subsidised housing and education subsidy are examples of social policies under the Institutional Redistributive Model.
- **Residual Model**
 - A Residual Model social policy is one that is meant to help individuals in unusual circumstances. For some reasons, these are individuals who could not provide for themselves. Subsidies and services in the residual model are not main stream. They are also temporary in nature, to tide people over until they can manage on their own.
 - This model also redistributes resources from the better off to the poorer people in society. Public assistance and Medifund schemes are examples of social policy under the Residual Model.
- **Industrial-Achievement-Performance Model**
 - Under the Industrial-Achievement-Performance Model, benefits, incentives and additional support for people are given on the basis of them achieving a certain status. Social policies that provide benefits under this model would aggravate inequalities and work in reversal to the social policies under the Institutional Redistributive and Residual Models.
 - Examples of policies under this model include scholarships, childcare tax-rebate and Gifted Education Programme.



Lesson Recording

Role of Social Welfare, Social Market and Social Policies

Library Back Forward Make Highlight Make Note Class Exercises Current Highlighter Zoom In Zoom Out Start Reading Stop Reading Hide Navigation

Search this book

Contents Figures Highlights

- Study Units
 - Study Unit 1: Film Form and Narrative
 - Learning Outcomes
 - Overview
 - Chapter 1: Film Form: The Sum of A...
 - Chapter 2: Creating a Narrative
 - Formative Assessment
 - Works Cited
 - Study Unit 2: Film Techniques: Mise-en-...
 - Learning Outcomes
 - Overview
 - Chapter 3: Introducing Mise-en-S...**
 - Summary
 - Formative Assessment
 - Works Cited
 - Study Unit 3: Film Techniques: Cinemat...
 - Learning Outcomes
 - Overview
 - Chapter 4: Cinematography
 - Summary
 - Formative Assessment
 - Works Cited
 - Study Unit 4: Film Techniques: Editing
 - Learning Outcomes
 - Overview

Chapter 3: Introducing Mise-en-Scene

lighting, and what is within the frame (this includes the characters, what they are wearing, where they are positioned, and how they are standing/sitting/lying).

What is the effect of these things that you see in the frame? How do they make you feel about the scene, the characters, and their mission?




Figure 2.1 Harry runs over to Dobby, who is revealed to have been fatally struck with a dagger.

(Source: *Harry Potter and the Deathly Hallows—Part 1*, dir. David Yates, 2010)

What you have just done is analyse the movie's mise-en-scene. So what exactly does this term mean?

Suggested Answer

You were asked to examine a still from *Harry Potter and the Deathly Hallows—Part 1*, in which Dobby is dying. To start with, list what you see in the stills from the film.

Setting: A deserted beach. In the distance, we can see a cottage that is later revealed to be Bill Weasley's home.

Colour and Lighting: The overall palette is dark and grey, with dim light.

Introduction to Film Studies

6 Chapters

HTML



Course Development Team

Course Guide

Study Unit 1: Singapore Legal System & Business Organisations

Study Unit 2: The Company - Incorporation, Ownership & Management

Study Unit 3: Company Finance

Study Unit 4: Intellectual Property as Business Asset

Learning Outcomes

Overview

Chapter 1: Introduction

Chapter 2: Patents

Chapter 3: Trademarks

Chapter 4: Copyright



Chapter 1: Introduction

Law is largely about protection of life, liberty and property. The law safeguards ownership by prescribing rights over a property and giving protection when these rights are threatened or violated. Due to this protection, the property and the rights over the property become valuable. Intellectual property ('IP') refers to various creations of the human mind which are treated by the law as items of property. These are products of the mind or intellect as opposed to products of labour or process. Intellectual property laws are thus a set of legal rules which give rights and protection to owners of these intangible products. Having these laws rewards and thus encourages innovations.

Intellectual property is today a much sought after commercial asset. In terms of market capitalisation, Apple Inc., Microsoft and Google are three of the largest companies in the world due in part to their owning invaluable intellectual property and constant efforts to innovate. According to a study¹ conducted by the United States Patent and Trademark Office, intellectual property supported at least 40 million jobs or about 30% of all jobs, in the US economy in 2010. The study also found that intellectual property-intensive industries accounted for about US\$5.06 trillion which was 34.8% of the US gross domestic product (GDP) in 2010.



Clearly, an understanding of intellectual property rights and their status as business assets has become an integral part of commercial law knowledge. This Study Unit covers the following intellectual property rights:

Patents

Trade Marks

Copyright

Registered Designs

Q & A