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Embedding Product Lifecycle Management (PLM) in Higher Education: a Case Study in Fashion Business

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INTRODUCTION:
Research Question: How might Product Lifecycle Management (PLM) be employed to foster a critical mindset and better prepare learners for occupational practice?

Product lifecycle management (PLM) combined with business process modelling (BPM) tools are providing organizations with the means to manage the complexities of the process that is created, sourced and sold globally.

Challenges of PLM / technical innovation for industry-orientated educational courses: independent processes, disciplines, functions and applications (Stark, 2011:8).

Diverse industries have adopted PLM as an essential tool for coping with the challenges of more demanding global competition, the means to manage the complexities of product that is created, sourced and retailed globally.

How might Product Lifecycle Management (PLM) be employed to foster a critical mindset and better prepare learners for occupational practice?

Research Question: How might Product Lifecycle Management (PLM) be employed to foster a critical mindset and better prepare learners for occupational practice?

METHODOLOGY:

A case study approach is judged to be the most appropriate methodology as it aims to understand both complexity and context in context setting. A case study approach has been adopted in order to gain sufficient emphasis on the particular site of the project influenced by Schatzki’s (2005) conception of the pragmatics. In this way, the influence of the site is recognized beyond a description of the context where the project occurs but to understand how the site is also a set of conditions impacting on the provision. This is consistent with social practice theory where the practice landscape and its associated practice traditions are recognised to be as significant as the practice under scrutiny and transformation. (Kemmis 2014:4) and states: “we cannot transform practices without transforming existing arrangements in the intersubjective spaces that support practices” to highlight the consequence of the site. The case is an illustrative example of practitioner research.

A multi-method approach allows for contributions from participants, stakeholders and third party advisors. A parallel ethnographic study of the intervention is proposed as a mechanism for reflecting on actions and consequences and fostering praxis is proposed.

DATA ANALYSIS:

With a social practice perspective the level of analysis is at the level of the work group rather than the individual. At this stage the table of invention for analysing practices as ‘sayings, doings and relatings’ (Kemmis 2014:39) is considered a useful method of analysis.

ACKNOWLEDGEMENTS:

This study represents one of the first attempts to embed a PLM philosophy and system within an undergraduate course aligned with the retail, footwear and apparel (RFA) sector. This study recognises that industry professionals need the technical skills to implement and manage a PLM system; however, the study also recognises the need for educators and learners to develop the critical thinking and moral purpose to align with the retail, footwear and apparel (RFA) sector (Ashworth, 2014). An educational partnership with PTC for their RealPLM software has been established. A conceptual framework of PLM is used as a means of modeling industry processes and practices holistically and displaying the interrelated nature of the elements in the process. What is sought through this intervention is the development of a critical mindset capable of utilizing technological innovations to critique current / traditional processes and practices and create alternatives that respond to the demands and opportunities of new needs and changes in circumstances.

REFERENCES:


BENEFITS / PRELIMINARY FINDINGS:

For curriculum design:

• the visual representation of PLM enables the curriculum to be contextualised in the industry

• provides a mechanism for aligning the curriculum with changing business needs

• “curriculum holes” where there are issues applying theoretical knowledge in practice are revealed at

For learning:

• provides a map through which the significances of the constituent parts of product realisation can be readily identified offering a pathway to develop higher cognitive skills

• PLM provides a theoretical and practical basis for active participation and application of ideas in an authentic setting

• it has enabled PLM to be identified as a representation of a “threshold concept” – the intersection of all the elements in a process of ever-increasing complexity (Meyer and Land, 2005)

• facilitates the critique of current practices and processes

For preparation for future practice:

• learners develop creative alternatives in response to the challenges and opportunities in the industry

• provide a mechanism to foreground a praxis stance / moral purpose as an aim for all professionals

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REFERENCES:


I nteractive exhibit of PLM uses the software application developed by the software company to provide a visual representation of the product lifecycle. The software application is used to demonstrate the impact of PLM on the industry. The software application is used to simulate the impact of PLM on the industry.

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