

# **Adapted Kaizen Group Enquiry Based Learning; a Four-Year Longitudinal Analysis Utilising a Hybridised Kaizen Group Model for Plural Participatory Inclusion in a Post Graduate Taught Programme and the Emerging Role of Digital Collaborative Space**

## **Introduction**

MSc Degrees offers non-core elective modules drawing students from other programmes, attracting a diverse student cohort with a range of prior subject knowledge and experiences. NBS8325 Supply Chain Information Systems and Technology has been developed to introduce MSc students to Kaizen group work in a professional work setting. Through primary data gathering of an organisation and its current strategies in relation to the adoption and adaptation of supply chain information systems and technologies, groups learn inquiry-based learning and research led outputs, how mainstream supply chain information systems work to allow for greater visibility, better integration and 'leaner' supply chains in more sustainable systems of control and delivery.

## **Module Design Rationale**

That business schools remain the first port of call for trainee managers suggests that a fundamental overhaul of teaching is not required, more subtle changes are needed; moving the student towards being a product of inquiry-based learning, producing knowledge through a research nexus. NBS8325 students are required to produce knowledge of learning to be tested through formative and summative assessment. Regular group meetings following a Kaizen group structure are held and recorded, with minutes of actions produced.

## **Group Learning and Leading**

A key role for the group in this module is the selection of a team leader. This allows continuous points of contact and to ensure participant involvement by acting as a change agent, identified in the adult education paradigm as crucial to roles facilitation and integration (Mühlemeyer & Clarke, 1997; Olivella, Cuatrecasas & Gavilan, 2008). From the perspective of adult educational psychology, it can be argued that Kaizen, in its role to address both performance and competent consistency is allied to behaviourism (Eley & Fujiwara, 2000).

The module design is also closely aligned with Mezirow's adult learning classifications; instrumental, dialogic and self-reflective (Mezirow, 1996). Postholm (2008) suggests that university students can also foster growth in the cross-fertilisation of ideas and concepts, cultivating augmentation in reasoning and cognition. Bennett & Cass (1988) identify a shortcoming in extant literature in that group work was primarily focussed upon group products rather than group management processes, promoting outputs as variables.

## **Hybridised Kaizen**

Successful hybridisation is evidenced elsewhere; whilst there is an argument that this can stifle individual growth, Kaizen overcomes this by promoting responsibility within the team framework. Research on hybridisation identifies degrees of success; failures are related to group implementation without consideration of the group member 'fit' to their culturally heterogeneous

model (Dawson, 1994). Trostel & Light (2000) comment on the issues that temporality in Kaizen project groups can lead to legacy concerns. Nevertheless, Sparkes and Miyake (2000) inform of a more successful uptake. Eley & Fujiwara (2000) record hybridised Kaizen group work benefits from recognition of local environments. Doeringer, Lorenz & Terkla (2003) identifying common traits to gain efficiencies, requires hybridisation to best suit local conditions. Kaizen hybridisation is revealed in the exploration of change management (Zink, Steimle & Schröder, 2008). Suárez-Barraza & Lingham (2008), then subsequently Suárez-Barraza (2010) record successful introduction of hybridised Kaizen in-to public sector environments to support HR processes.

Issues identified in the literature have been addressed in the module design; there is a defined output, formative assessments and feedbacks to drive group focus and equal participation. Group presentation of 50%, and 5000 word group report of 50% are used as summative assessment tools, reinforcing the 'short and sharp' focus required under a single year, full time, intensive conversion programme.

### **Module Delivery**

Introduction of Kaizen in itself, is little more than the introduction of a monism within a didactic pedagogical scheme of work, but the introduction of a hybridised Kaizen within a group setting overcomes cultural pluralism in mixed groups of students. The process allows groups continuity as well as tracking their own development and improvement. It is this collective learning mind of the group, not the organisation they have assessed, that is the driving force in this hybrid Kaizen system, which closely aligns with Chaordic Systems Thinking Theory's approach to performance management to stimulate group interactions as learning organisations (van Eijnatten & Putnik, 2004). Action learning is contingent upon clear definition and strong facilitation for successful outcomes (West & Choueke, 2003).

### **Practical Impact:**

This module offers an innovative approach to learning; a hybridised management tool overcomes differences, utilising a process framework to deliver quality assurance and enhancements, whilst engendering mutually beneficial and reciprocal relationships amongst group members, driving plural participatory inclusion, common goal setting and skills development in a process orientated environment in which great emphasis is placed upon non-classroom group-directed study.

Performance data indicates that the adoption of hybridised ~~Kaizen—drives~~ Kaizen drives plural participation. Group outputs exceed the requirements placed upon pedagogical instruction, whereby didactic management of student groups undergoes a reverse transmogrification, to managing student group 'know-how' in analysis of problem directed scenarios. Hybridised Kaizen paradigms hold more value than an original attributable technique, whereby well managed hybridised models can add value to student learning and preparedness.

### **Digital Platform Emergence**

In February 2018 Microsoft Office 365 ~~tools-apps~~ adoption became compulsory commencing with Office 365 Groups. At the end of the module a survey was developed which sought views from groups. An increase of bottom end marks by 1.8% was recorded which, given the historical closeness of performance data, whereby bottom end marks have only varied by 0.7% over the three previous

years, ~~indicates~~ indicates a benefit to moving to formalised data and task sharing platforms other than social media platforms. As a result of this survey and this lift, a decision has been made to migrate from ~~MS-Office~~ Groups to ~~MS-Office~~ Microsoft Teams as an enhanced virtual hub for the groups. Teams brings together the full breadth and depth of Office 365 to provide a true hub for a teamwork environment so that individual group members have all the information and tools they need to support equal and plural participation. Finally, it is our conjecture that it is not just the process of course progression that is under Kaizen, but also delivery, tools, support, marking and feedback from the teaching team.

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