**Creating Learning Games in Ten Steps** Whitton & Moseley, ECGBL 2012



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**Context**

1. Set learning objectives
2. Constraints

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| Time, money, skills, student characteristics, student numbers, technology, accessibility,subject features |

**Grand design**

1. Set type of game

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| Board, card, quiz, physical, puzzle, web-based, role play, mobile app, console game, computer… |

1. Set core mechanics

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| What is the goal, what are the win states, rules, scoring, progression, rewards |

1. Review game balance

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| Check playing time, difficulty, level of chance, collaboration and competition, seriousness, physical vs. mental balance, etc. |

1. Build first prototype

**Refine design**

1. Add story layer

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| What is the game context? Who are the players? Create narrative, characters, etc. |

1. Add sub-mechanics

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| Conflict, collection, chance, sabotage, tension, speed, risk, rewards, events, etc. Adds interest and (re)playability to the core design |

1. Check learning layer against context

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| Review against learning objectives; does the game include collaboration, reflection, assessment etc. as needed by the context/objectives? |

1. Produce final game/assets



**Play!**

For further advice on creating low-cost games for learning, see:

Whitton, N. & Moseley, A. (2012) *Using Games to Enhance Learning and Teaching: A Beginner’s Guide*. Routledge.