

The management game as didactic approach for design teaching

*on how students and staff evaluate design skills
development*

Session: N-9

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Location: U - Faculty of Architecture

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Management in the Built Environment

A call for performance improvement

Key Issues	Barrier to subcontractor integration into the supply chain	Change required to alleviate the barrier
Financial	Late and incorrect payments Tendering process Retention	Fair payments from main contractors Main contractors need to focus on value rather than price Trust needs to exist between parties
Programming	Unrealistic programme times	Parties should be involved in construction projects earlier
Contractual	Traditional contracts do not encourage good working relationships	New contractual documents or less reliance on contracts
Main contractor's staff	QS's do not encourage subcontract integration Estimations are too demanding on small organisations	QS training in communication skills Educate estimators into the demands of these business
Knowledge and information	Companies do not understand other business within the supply chain	Time needs to be taken to learn from partner organisations
Partnering	Some partnering relationships are executed for the wrong reasons Many partnering relationships were one sided Some subcontractors lack skills relating to design, legislation and costing that may be required for partnering	All employees should be educated in the benefits of partnering Main contractors need to offer subcontractors benefits if they are to enter into such relationships Subcontractor training for those lacking skills
Miscellaneous	Main contractors do not treat subcontractors fairly	Educate main contractors into the business needs of smaller organisations

Why management games/roleplay

The challenges facing project managers and real estate practitioners:

- Urban/area
- Redevelopment/densification
- Environmental/circular economy
- Societal/scientific

are all guaranteeing multiple stakeholder and complex ill-defined problems requiring multi-disciplinary design approaches and integrated solutions

Learning to work together on integration is as important as learning the necessary skills and components on your own

BK6ON5 Area (Re)Development in the Metropolitan Landscape: Case A20-zone Schiedam

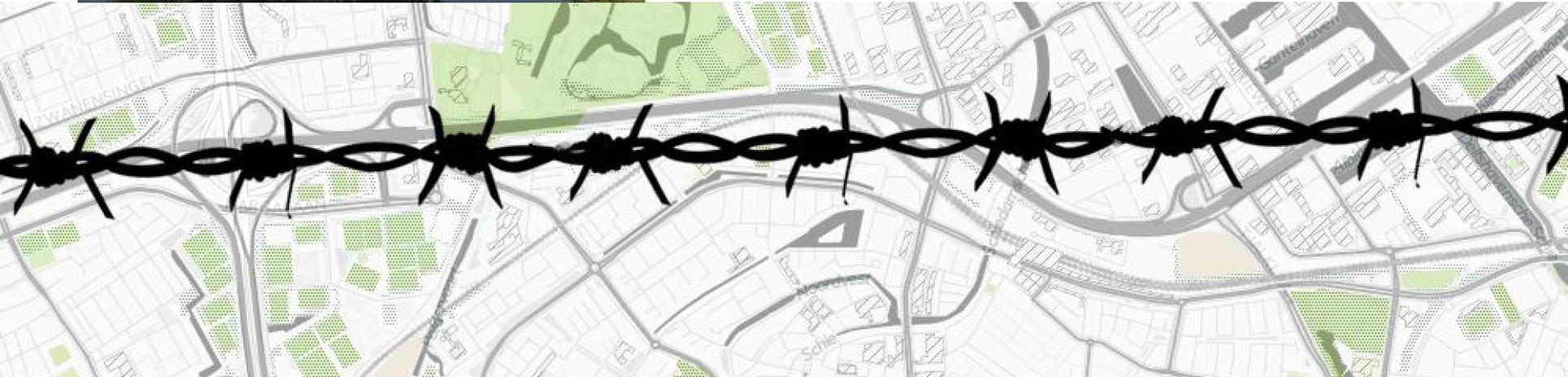


BK6ON5 Area (Re)Development in the Metropolitan Landscape: Case A20-zone Schiedam



Redevelopment of Schiedam with special focus on the barrier of the highway as well as social upgrading* of the community

E.g. low real estate values, high migration and unemployment



AR2R025 Urban (re)development game: Case Cruquius Region - east of Amsterdam



AR2R025 Urban (re)development game: Case Cruquius Region - east of Amsterdam



From a once lively harbour through a deteriorated industrial area into a very desirable necessary* urban area.

*Amsterdam market is characterised by a high demand and low supply of housing



MSc and BSc course in numbers

BSc BK6ON5	MSc AR2R025
<ul style="list-style-type: none">• 10 ECTS design course• compulsory BSc• 3rd year BSc, 5th semester• Twice a year, in Q1 and Q3• 90-250 students per course, (1.150 /4 yrs)• Contact hours: 6 hours per week• Circa 15 tutors on role assistance and workshops, and 8 group tutors (double groups)• Every year a new case	<ul style="list-style-type: none">• 10 ECTS integrating course• compulsory MBE, elective other tracks• 1st year MSc MBE, 2nd semester• Once a year in Q4• 50-70 students per course, (305 /5 yrs)• Contact hours: 8.5 hours per week• Circa 7 tutors on theory, 11 tutors on role assistance, and 4 group tutors• Every two – three years a new case

Urban area development: an overview



MSc and BSc Learning objectives

BSc BK6ON5	MSc AR2R025
<ul style="list-style-type: none">• Integrate programmatic, functional, spatial, (environmental) engineering, decision analysis and economic aspects on different scales• Understanding different perspectives in the simulation of a design process (strategy)• Analysis, research and discuss 'the practical context'• Document, present and report on individual and group level	<ul style="list-style-type: none">• Understand group dynamics, develop negotiation, decision making and conflict management skills through role-simulation• Understand the context, content, players and means of implementation during the cyclic phases of urban development process• Develop urban strategy

MSc and BSc Overarching objectives

BSc BK6ON5	MSc AR2R025
<ul style="list-style-type: none">• Exploring urbanism, planning, management and real estate as professional fields• Exploring group work, cooperation and integrated design	<ul style="list-style-type: none">• Integrate previous knowledge in a practical context• Deepen knowledge on urban redevelopment and (negotiation) skills



MSc and BSc Education method

BSc BK6ON5

- Tutoring (6 times in the first 8 weeks) in monodisciplinary role teams of 10-24 students
- Assistance (6 times in the last 7 weeks) in multidisciplinary design teams of 9 students
- 4 workshops on supporting topics
- Additional session(s) with the 'principal', the professional partner is the game responsible for bringing in the topic.
- Close cooperation with the parallel course on theory of urban (re)development.

MSc AR2R025

- Role simulation
- Tutoring (once a week) in interdisciplinary teams of 10-13 students
- Tutoring (once a week) in group of 4-6 people for same discipline
- Participating in intensive workshop urban development charrette to work on multi-disciplinary solution
- Participating in discussion in seminar form to debate how temporary urban development solution can be incorporated

MSc and BSc Assessment strategy

BSc BK6ON5	MSc AR2R025
<ul style="list-style-type: none">• Final presentation, a 30 minutes group presentation with Q&A, followed by jury presentation (pitch) for the best groups: assessment of the process (50%).• Peer reviews are incorporated in assessing group work• The individual role report result in a grade (50%) related to the knowledge capture (product).	<ul style="list-style-type: none">• Final presentation, , a 35 minutes group presentation with Q&A, and an award of best plan selected by the jury from the practice• Students are assessed based on final urban development plan;• Individual final report;• Performance in process;• Peer review• Students' performance are assessed by role assistants (50%) and group supervisors (50%)



Comparison between MSc and BSc course

- Both courses are using gaming: role play and simulation of parts of a development process to practise the integral approach and professional cooperation
- Both courses are starting with familiarising with the case, settings and conditions, market analysis, stakeholder/user analysis, policies and planning in force
- Both courses adds role specific knowledge to breed specialists
- Both courses are intensive in time of tutors and complex in coordination
- Both courses are using professional partners to bridge to practice and add this practical layer

Comparison between MSc and BSc course

- Both courses have a strong focus on communication (instructions, feedback, peer reviews) – a key element of gaming
- Both courses are feeding a competitive attitude within collaboration. In the MSc added competitiveness due to more parties within a role.
- Difference in phases: In the BSc, the final product is seen as a result of group work, not directly graded, where in the MSc the final product is based on negotiation process and contract forming.
- Main difference in overarching goals: exploring team work and professional fields versus deepening knowledge
- Therefore focus on understanding of fields and process participation in grading for the BSc versus focus on quality of the final products in the MSc.

Further elaboration



Further elaboration

- Working paper will be extended with 2 additional courses of the Urbanism track
- Extensive elaboration of reflection as a mean in gaming
- Outcomes of quality control (statistical) and reflections (reports and panels)
- The role of ethics in the curriculum and within the four 'games' in particular
- *Cultivating the next generation designers: Group work in urban and regional design education*, Lei Qu, Yawei Chen, Remon Rooij and Peter de Jong, in *International Journal of Technology and Design Education*, Springer (and book, Sense Publishers)

Playing with wide views, Thank you for listening



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