“Measuring the added value of housing for primary education”

mr. D (Dirk) Kootstra MScRE
dr. ing. J. Veuger MRE FRICS
Dirk Kootstra

• **Researcher**
  – Professorship Public Real Estate, *Hanze University*
  – PhD-candidate *Radboud University Nijmegen*

• **Lecturer**
  – Real Estate Valuation (Real Estate Management)
“Measuring the added value of housing for primary education”

Outline presentation:

• Introduction
• Results
• Discussion
Introduction

• It seems obvious that there will be more budget for investments in real estate when proof can be found that **CREM will add value to an organisation** (Appel-Meulenbroek, 2014).

• **The change of funding for Universities has led to another priority setting**: in the past decisions were based on cost efficiency, architectural quality and eliminating dislocations but now factors such as customer appreciation and socio-cultural aspects play a more important role. (Geselschap, 2013)
Introduction

Research question:
“which aspects are relevant to measure the added value of a school building for the different stakeholders”.

To be answered by:
• Who are the stakeholders?
• Meaning of “Added value”
• Aspects in which added value is shown
Results (stakeholders)

- Stakeholders are individuals, groups of individuals or organizations who are affected by the performance of the building (Van den Bosch, 1996)
- Primary the stakeholders of buildings are: owners, users and the environment (de Vries, 2007, Mobach, 2009 and Van Beukering)
- For schoolbuildings the stakeholders are: municipality, school board, employees, parents and children and the environment/society
Results (stakeholders)

A real estate object represents a threefold of values (Keeris, 2006):

- as part of the built environment for the collective of the community
- for use on individuals
- as a capital asset for the owner and its user
Results (added value)

“lasting outcome for all concerned”

Kemperman ea., 2013)

1. Customer value
2. Employee value
3. Financial value
Results (added value)

Important distinction between:

Exchange value

and

use value
Results (showing added value)

Mr. Dirk Kootstra MSc & Dr. ing. J. Veuger MRE FRICS

Measuring the added value of housing for primary education

Results (showing added value)

<table>
<thead>
<tr>
<th>Added value by:</th>
<th>Municipality</th>
<th>Schoolboard</th>
<th>Employees</th>
<th>Parents / children</th>
<th>Environment / society</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase value of assets</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Marketing / sales</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Innovations</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Employee satisfaction</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Productivity</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Flexibility</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Reduce costs</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

Mr. Dirk Kootstra MSc & Dr. Ing. J. Veuger MRE FRICS

Measuring the added value of housing for primary education
Results (showing added value)

• Research by Rianne Appel-Meulenbroek (2014) shows in what way the structural-, the installation- and location aspects effect the added value.

• Based on this, a performance measurement system can be developed to evaluate the value that is added for the different stakeholders.
Originality / Value

• There are no publications yet on instruments that measure the added value experienced by different stakeholders with regard to school buildings.
• By measuring the added value through other aspects than book value and depreciations as well, one gets a better overall picture of the actual output of the building.
• With the insights gained through this measurement, a more extensive initial investment in a school building might be justified.
• The instrument can also be of value during negotiations on spending/dividing financial means for housing between school boards and municipalities.
• Thus, the value of this instrument is more comprehensive than just the use of it in the experiment that will be carried out in the framework of my dissertation.
More information?

• Thank you very much for your attention!

• If you want more information, please contact me:
  email: d.kootstra@pl.hanze.nl

• Phone 0031 655372880