

Practical learning for entrepreneurial competence. A study on learning activities and competencies of entrepreneurs in innovative horticulture

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The competence train is riding and everybody wants to ride along



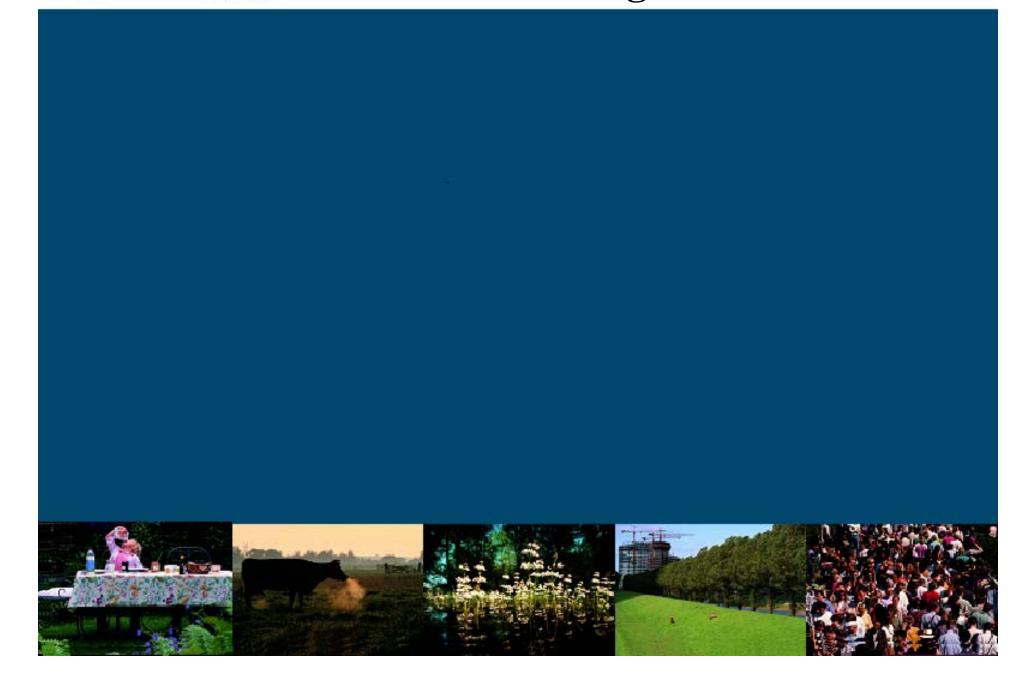


Many educational experts are very curious about competence development





Some are a bit ignorant





Workplace learning – aimed at employees

- Low skilled workers (Raemdonck, 2005)
- Policemen (Doornbos, 2006)
- Nurses (Berings et al., in press)
- What about employers
 - entrepreneurs?





Field of study

- Horticulture under glass in NL
- 15% growth rate from2001 to 2005
- N of holdings 7,060 in 2001; 5,650 in 2005







Trends

- High tech
- Knowledge farming
- Diversification
- Internationalization
- Entrepreneurship
- Scale enlargement
- Cluster approach











Research questions

- <u>evaluation of competencies</u> that are <u>relevant</u> for entrepreneurship by entrepreneurs, internal coworkers (employees) and external consultants?
- present <u>competence strengths and weaknesses</u> of entrepreneurs as perceived by entrepreneurs themselves, their co-workers and consultants?
- <u>learning activities</u> that entrepreneurs perform and how are they related to the entrepreneurial competencies needed?





Theoretical context

- Entrepreneurship
 - Chandler and Jansen, 1992
 - Gartner, 1988
 - Man et al, 2002
 - Shane, 2003
 - Gielen et al, 2003
 - Lans et al, 2005
- Competence
 - Mulder, 2001
 - Biemans et al, 2004
 - Mulder and Weigel, 2006
 - Weigel and Mulder, 2006
 - Wesselink, 2006











Participants in the study

- Entrepreneurs
- Committee MembersAgriculture and HorticultureOrganizations Netherlands
 - about twenty of these committees
 - about 200 members of these committees in total







Research group

- 1 or 2 committee members were nominated
- Competence assessment
 - Entrepreneurs self assessment
 - Assessment by an internal expert
 - Assessement by external expert
- Data of 10 entrepreneurs collected





Assessment instrumentation

- Assessment, a questionnaire
 - general questions
 - 22 competencies (Man et al, 2002)
 - Statements
- Answering categories per item
 - Level of development of competency
 - Extent to which there is possibility for development
- Two five-point scales
 - 1 = very limited
 - 5 = to a very high extent









<u>Competencies</u>

- Learning orientation
- Self management
- Planning
- Market orientation
- Result orientation
- Networking
- Leadership
- Problem analysis
- Organizing
- Conceptual thinking
- Negotiating

- Persuasiveness
- Vision
- General awareness
- Management control
- Value clarification
- Judgement
- Team work
- Strategic orientation
- HRM/HRD
- International orientation









Average Competence Assessment

Entrepreneurs	Av Score self assessment	Av Score assessment by co- worker	Av Score assessment by consultant
1	3.36	3.50	3.41
2	3.18	3.23	3.19
3	2.59	3.27	3.64
4	3.27	3.55	3.50
5	2.91	3.05	2.77
6	2.86	3.41	3.00
7	2.86	3.50	3.38
8	3.05	4.09	3.73
9	3.73	2.86	3.68
10	3.14	3.14	4.09
Average	3.10	3.36	3.44

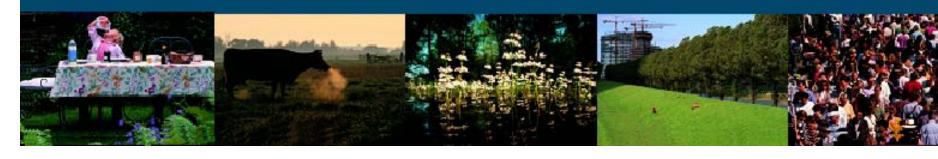






Spearman correlation coefficients

Entrepreneur	R _s Self-Coworker	R _s Self-consultant	R _s Coworker- consultant	
1	143	.590(**)	.147	
2	.137	.427	.351	
3	.225	.429(*)	.042	
4	.326	.068	004	
5	.219	.245	.556(**)	
6	080	.493(*)	.204	
7	.045	275	.075	
8	.069	.192	.232	
9	050	377	.081	
10	.225	.377	091	
Average	0.097	-0.021	0.100	





Top and bottom 3 strengths and weaknesses

Entrepreneurs Competencies	1	2	3	4	5	6	7	8	9	10	N+	N-
Learning orientation		+	+			+			+	+	5	0
Self management			+	2	+	•	+		+		4	1
Planning	+			+				+			3	0
Strategic orientation			-	-				-			0	3
HRM/HRD	-		-	-	-		-			-	0	6
International orientation	•		•	-	-		-	-	-	-	0	8







Frequency of learning activities

Entrepreneurial learning activity	n	%
Reflection	21	19.8
Observation	16	15.1
Experiment	12	11.3
Performing occupational tasks	11	10.4
Checking information	9	8.5
Discussion	9	8.5
Conversation	6	5.7
Receiving feedback	6	5.7
Asking a specific question	5	4.7
Holding onto a personal vision	4	3.8
Replication	4	3.8
Acquiring knowledge through training	3	2.8
	106	100.0









Three portraits of entrepreneurs

- Rudy the reflector
- Olaf the observer
- Eric the experimenter





Learning activities by competence cluster

Competence cluster	N of learning activities	%
Strategic	28	26
Opportunity	21	20
Organizing	21	20
Technical-Occupational	19	18
Relational	10	9
Commitment	5	5
Conceptual	2	2
Total	106	100









Conclusions

- Competencies are evaluated differently
- Learning orientation as competence strength
- Entrepreneurs are also good in self-management
- International orientation weak
- Human resource management weak
- Entrepreneurship is a rich, authentic and powerful learning context





Conclusions

- Learning by looking at examples
- Need for role models
- Mistakes can be learning sources
- Sharing mistakes for mutual learning
- Competence assessment + mapping learning activities are powerful communication tools





Conclusions

- Helping combined evaluation from inside and outside the company
- Learning from outside
- Solving the paradox of inward and outward orientation
- Competence assessment: deeper selfreflection + further performance improvement
- Entrepreneurs were open to this





Learning metaphors

- traveling
- trekking
- exploring
- entrepreneurial learning as climbing



