



Kennisnet



Accelerating Educational Change

Evaluating the development of the 'ability to innovate' within teacher training institutes

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Presentation overview

Short introduction to the Kennisnet projects
Learning from the Future 3 + 4

Goals, main question & structure of both studies

The 'ability to innovate' model

Overview, results and key conclusions

Reflection and recommendations



Learning from the future 3+4

→ **accelerated education change**

→ teacher trainers experimenting with 'new ICT'

→ **strengthening the 'ability to innovate'**

→ teacher education and practice in schools

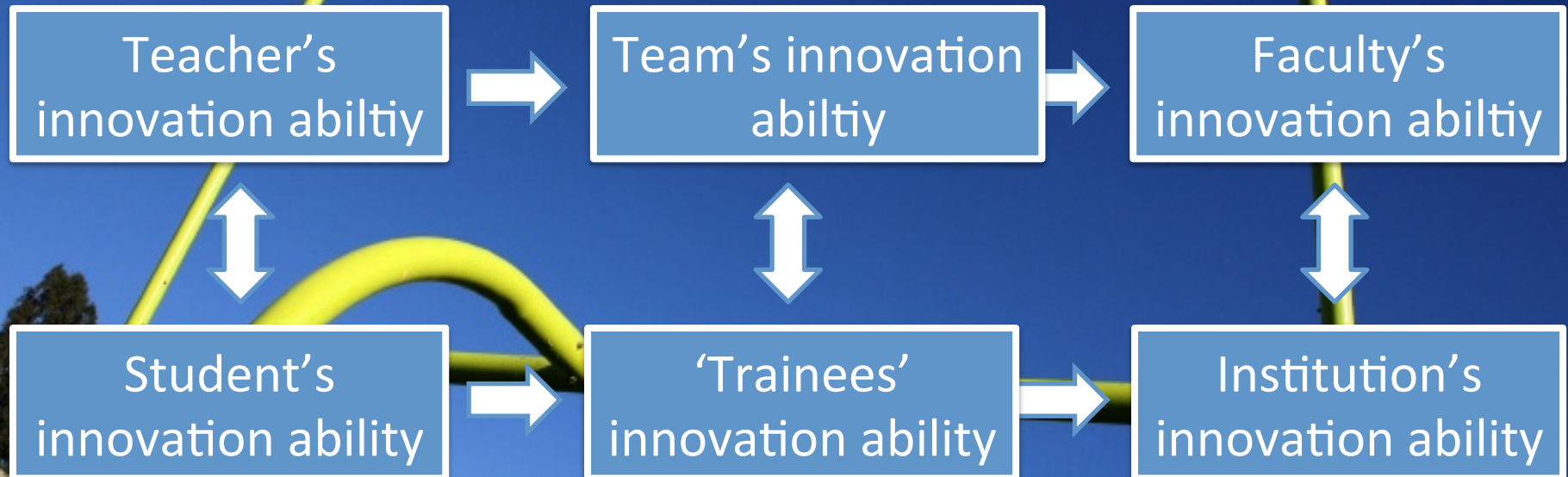
→ **teacher training institutes**

→ primary and secondary education

Goal of the evaluation research

→ experiences with, and appreciation of, the innovative use of ICT

→ project's effect on the ability to innovate



Main research question (both studies)

How does the 'ability to innovate' of teacher training institutes taking part in the Kennisnet projects 'Learning from the future', develop?



Design of the evaluation research (study 1)

developing an 'ability to innovate' model based on theory → instrumentation

participants → participating teachers and students + non-participating teachers

participating
teachers

Individual
interviews [8]

participating
students

Focus group
[4 participants]

non-participating
teachers

Focus group
[5 participants]

Transcripts of all voice recordings → analysis and interpretation of the data

Design of the evaluation research (study 2)

developing an 'ability to innovate' model based on theory → instrumentation

participants → participating teachers and students + non-participating teachers + other stakeholders

participating
teachers

Focus group
[8 participants]

participating
students

Focus group
[4 participants]

non-participating
teachers

Focus group
[4 participants]

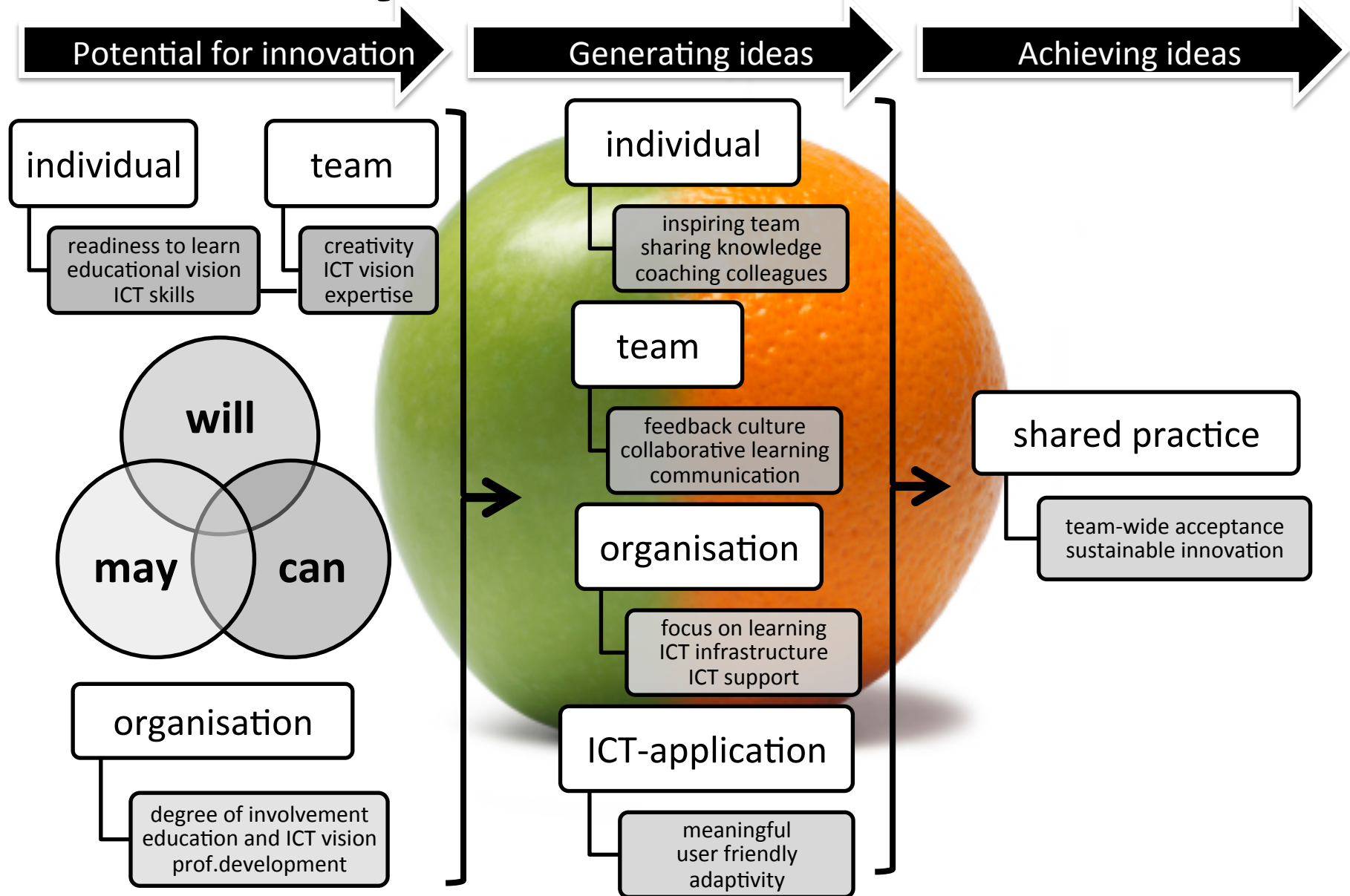
managers and
trainers

interview
[4 participants]

Transcripts of all voice recordings → analysis and interpretation of the data



'ability to innovate' model



Research results (study 1)

category	teachers [active]	students	teachers [other]
general	<ul style="list-style-type: none"> • Strong ownership • Reflection on education 	<ul style="list-style-type: none"> • Very motivated • More involved 	<ul style="list-style-type: none"> • Colleagues were inspired • No active involvement
individual	<ul style="list-style-type: none"> • More student centered • Ambition to learn 	<ul style="list-style-type: none"> • Big differences skills and visions teachers 	<ul style="list-style-type: none"> • Connection to practice • Own ICT skills
team level	<ul style="list-style-type: none"> • No shared vision • No feedback culture 	<ul style="list-style-type: none"> • No shared vision • Varied view on ICT use 	<ul style="list-style-type: none"> • No shared vision • Did not learn much
organisation	<ul style="list-style-type: none"> • Committed management • Voluntary ICT implementation 	<ul style="list-style-type: none"> • Doubts about policy • Help desk is fine 	<ul style="list-style-type: none"> • Facilitated teaching • Adjusted ambitions
application	<ul style="list-style-type: none"> • Connection to practice • Technical questions 	<ul style="list-style-type: none"> • Teachers grew • User-friendliness 	<ul style="list-style-type: none"> • Relationship to needs • Relationship to practice
future	<ul style="list-style-type: none"> • New experiments • Possibility to grow 	<ul style="list-style-type: none"> • Differences in team • Concerning primary schools 	<ul style="list-style-type: none"> • Take sufficient time • External support

Research results (study 1)

category	teachers [active]
general	<ul style="list-style-type: none"> • Strong ownership • Reflection on education
individual	<ul style="list-style-type: none"> • More student centered • Ambition to learn
team level	<ul style="list-style-type: none"> • No shared vision • No feedback culture
organisation	<ul style="list-style-type: none"> • Committed management • Voluntary ICT implementation
application	<ul style="list-style-type: none"> • Connection to practice • Technical questions
future	<ul style="list-style-type: none"> • New experiments • Possibility to grow

Sub conclusions (study 1)

group	sub conclusions
teachers [active]	<ul style="list-style-type: none"> • The project is a powerful instrument to strengthen one's development • Transfer is only possible when based on a shared vision and strong guidance <ul style="list-style-type: none"> • Time available to experiment with ICT is a deciding factor • Support from Kennisnet was important, but temporary
students [active]	<ul style="list-style-type: none"> • Project contributed to gaining insight into own innovation potential • Effect of project is visible mainly for teachers actively involved <ul style="list-style-type: none"> • Management needs to encourage teachers to experiment with ICT • Involve the primary schools; they are an important stakeholder
teachers [other]	<ul style="list-style-type: none"> • A shared vision on educational use of ICT must be starting point • Limited ICT skills and minimal trust are potential risks <ul style="list-style-type: none"> • Support through Kennisnet is also necessary for the follow up • ICT innovation in small steps in a small scale context is preferred

Research results (study 2)

category	teachers [active]	students	teachers [other]
general	<ul style="list-style-type: none"> • Time for learning together • Reflection on education 	<ul style="list-style-type: none"> • Very motivating • ICT skills 	<ul style="list-style-type: none"> • Getting to know ICT • Share even more knowledge
individual	<ul style="list-style-type: none"> • Awareness: role model • Difference in opinion 	<ul style="list-style-type: none"> • Large differences • Know the limits 	<ul style="list-style-type: none"> • Not experimenting • Own ICT skills
team level	<ul style="list-style-type: none"> • No shared vision • No feedback culture 	<ul style="list-style-type: none"> • No shared vision • expertise unused 	<ul style="list-style-type: none"> • No shared vision • Not enough exchange
organisation	<ul style="list-style-type: none"> • Involved management • Limited support 	<ul style="list-style-type: none"> • Doubts about policy • ICT use too voluntary 	<ul style="list-style-type: none"> • Stimulates ICT • Good project leader
application	<ul style="list-style-type: none"> • Connected to practice • Some technical issues 	<ul style="list-style-type: none"> • Relationship to practice • ICT situation in practice 	<ul style="list-style-type: none"> • More effective education • Use experienced teachers
future	<ul style="list-style-type: none"> • New experiments? • Involving colleagues? 	<ul style="list-style-type: none"> • Differences in team • Also in practice 	<ul style="list-style-type: none"> • Possibility to grow • Use the innovators

Research results (study 2)

category	teachers [active]
general	<ul style="list-style-type: none"> • Time for learning together • Reflection on education
individual	<ul style="list-style-type: none"> • Awareness: role model • Difference in opinion
team level	<ul style="list-style-type: none"> • No shared vision • No feedback culture
organisation	<ul style="list-style-type: none"> • Involved management • Limited support
application	<ul style="list-style-type: none"> • Connected to practice • Some technical issues
future	<ul style="list-style-type: none"> • New experiments? • Involving colleagues?

Research results (study 2) (continued)

category	managers and trainers
general	<ul style="list-style-type: none"> • Targeted approach to innovation achieved • Attitude teachers to use ICT changed
individual	<ul style="list-style-type: none"> • Large differences in opinions teachers • More contribution to development curriculum
team level	<ul style="list-style-type: none"> • Development of vision at organisation level • Variety of formal/informal exchanges
organisation	<ul style="list-style-type: none"> • PM positive about leadership management • Kennisnet supported PM and manager
application	<ul style="list-style-type: none"> • ICT can also support working more efficiently • Adjusted to different contexts of the users
future	<ul style="list-style-type: none"> • Start new experiments • Targeted approach of the project

Final conclusions

factor	relationship to 'ability to innovate'
time to learn	Important pre-condition for innovation process
vision on use of ICT	No shared vision on educational use of ICT
leadership style	Involved in content; focused investment
ICT characteristics	ICT must contribute to achieve educational goals
infrastructure	didactical and technical support needed



Reflection on research results

Project approach created distance between groups

Can/want/may plays a role at the individual level

If ICT implementation is voluntary, 'ability to innovate' reduces

Collaborative learning makes innovation more likely

Lack of feedback culture limits learning process

Management needs to guide innovation process

Potential for innovation in teacher training institutes has grown

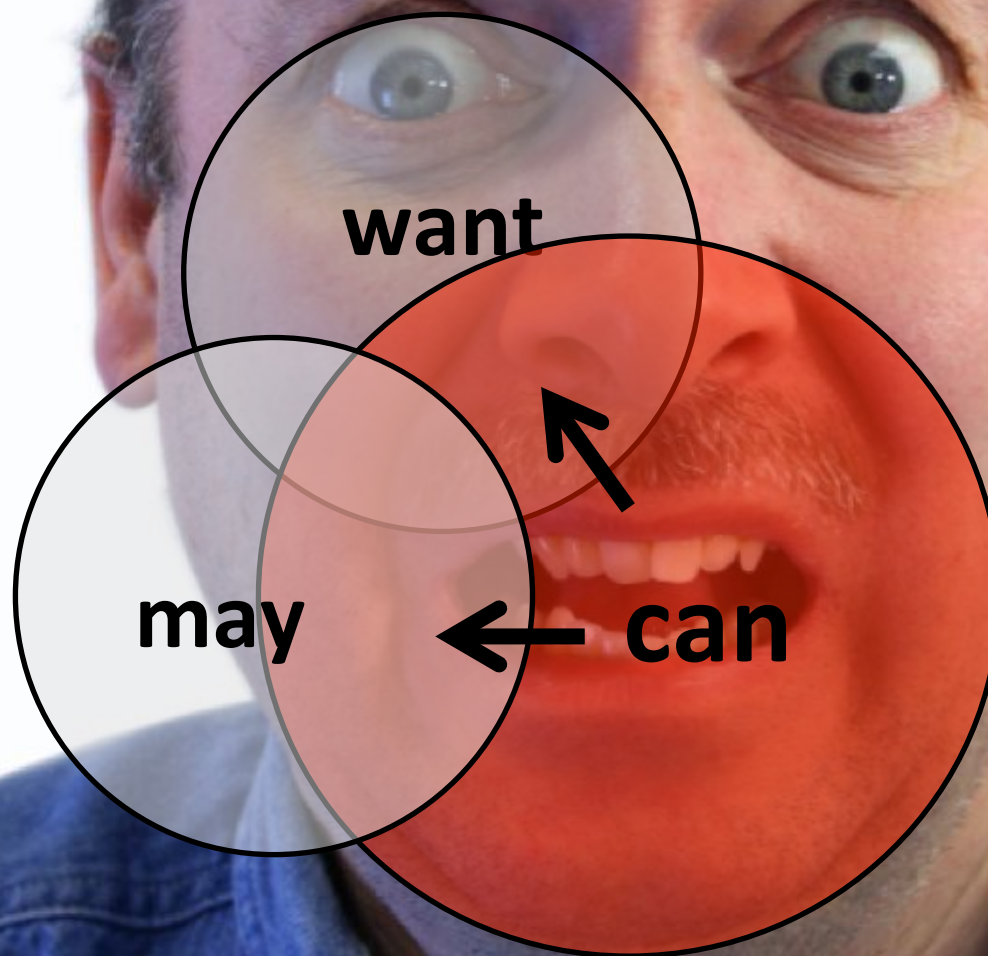
Characteristics of innovators

→ 'want' more important than 'can' and 'may'



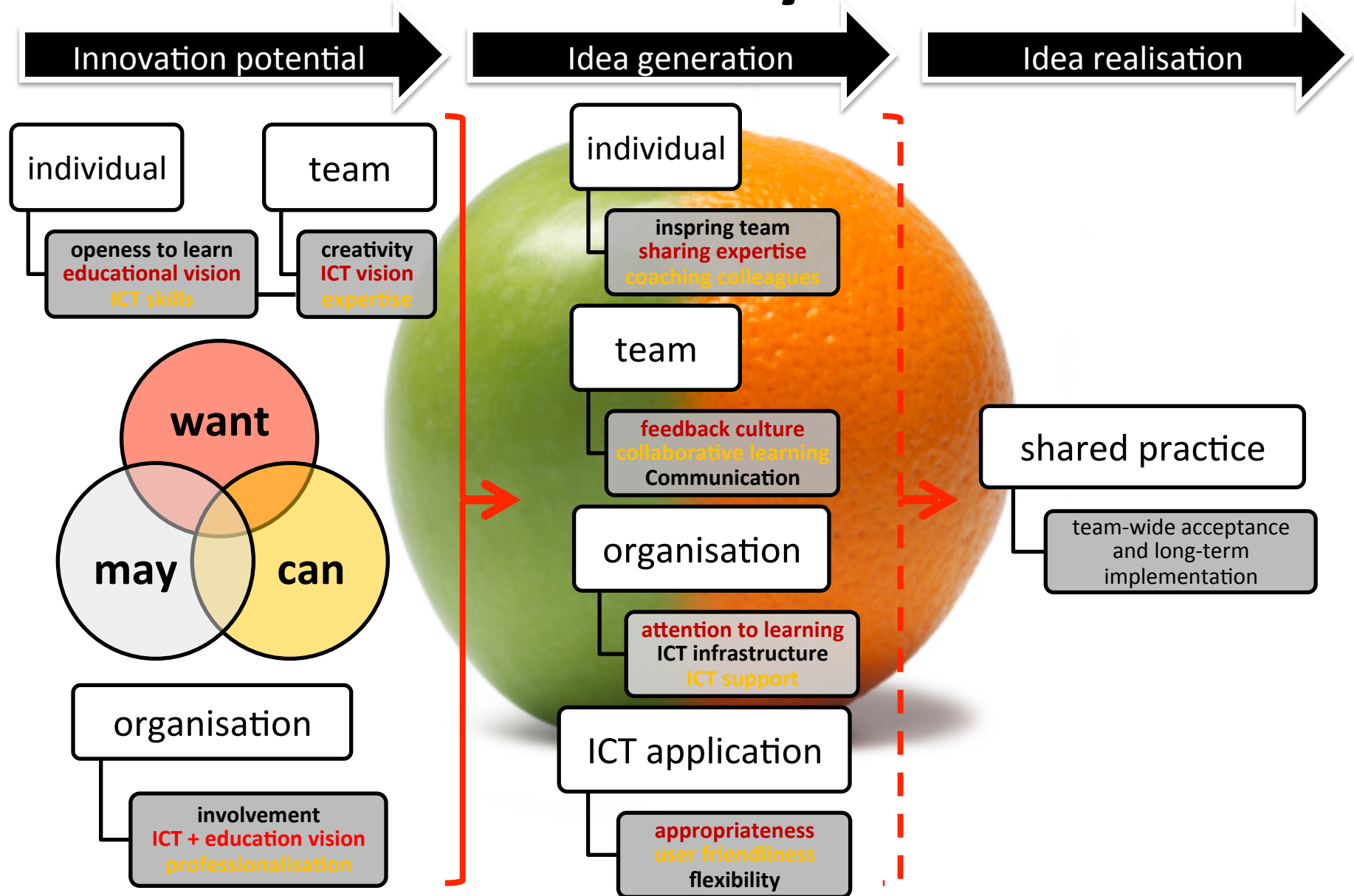
Characteristics of [late] followers

→ 'can' more important than 'want' and 'may'





Reflection on 'ability to innovate'



Recommendation (studies 1 & 2)

- Minimise gap between innovators and followers
- Encourage experimentation together and share expertise
- Involve more teachers in less experiments
- Strengthen vision development through shared learning
- Make ICT development compulsory
- connect bottom up approach with top-down policy



Questions?



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research reports:

<http://innovatie.kennisnet.nl/onderzoek-naar-het-leren-van-de-toekomst-bevestigt-model-voor-innovatiekracht/>