Teacher's Networks and their Opportunities for Teacher's Professional Development: a Case Study on eTwinning

Riina Vuorikari, Adriana Berlanga, Romina Cacia, Yiwei Cao, Sibren Fetter, Anne Gilleran, Ralf Klamma, Yves Punie, Santi Scimeca, Peter Sloep
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Outline

- Introduction
  - Professional development
- Teacher's networks
- Study case: eTwinning
- Tellnet project: how networks can support teachers' development
- Conclusions
Professional Development: definition

- Activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher
- Development can be provided in formal and informal ways
- Made available: courses, workshops, collaboration between schools or teachers across schools, within schools

(OECD, 2009)
eTwinning: Teachers' Network

- Community for schools in Europe
- Promotes teacher and school collaboration mainly through projects (improving teaching skills, projects between students from different countries, etc.)
- Over 150,000 teachers from 32 European countries
- Supported by the European Union (Lifelong Learning Programme)
eTwinning reach = number of eTwinners / number of teachers

On average, 2.64% of European teachers are eTwinners.
Welcome to eTwinning
The community for schools in Europe

Get started

REGISTER NOW!

New eTwinning publications!
eTwinning has now released its two latest publications: the eTwinning book *Voices of eTwinning: Teachers talk*, and the eTwinning report *Teachers' Professional Development: an overview of current practice*.

Have you participated in a Learning Event yet?
This spring there are nine different events to choose from ranging from topics such as internet safety issues, the use of web-based video to an examination of learning the language of your neighbour.

Today in eTwinning
There are:
- 133088 active members
- 5332 active projects

Latest member:
- Angelis Trinidad
  - Collège Bertone

Latest project:
- Árboles y Ríos

Browse schools, people, projects
By subjects
- Art
- Astronomy
- Chemistry
- Citizenship
- Classical Languages (Latin & Greek)
- Cross Curricular Design and Technology
- Drama
- Economics
- Environmental Education
- Ethics

By location
- Select country
eTwinning: Online Tools

- Find teachers
- Meet virtually
- Exchange ideas and practice examples
- Participate in eTwinning groups
- Engage in online-based projects
  - Offers a framework that promotes sharing practices and future networking
eTwinning: Professional Development

- Formal opportunities: online courses
- Informal opportunities: projects
- Offers potential for lifelong learning key competences
  - communication in foreign languages
  - digital competence
  - interpersonal, intercultural and social competences
How eTwinning can become a trigger for professional development?

• How teacher's social networks support professional development?

• How the social influence of these networks could engage more participants? --> avoid "islands of innovation"
Tellnet: Teachers Lifelong Learning Networks

• To explore, manage and support eTwinning as a platform for formal and informal teacher's professional development

• Novel tools/approaches: Social Network Analysis, peer support, scenario building

• Funded by the European, Lifelong Learning Programme; 3 years

• Partners
Tellnet: Approach

• Identify networks that have been effective in sharing practices
• Peer-support tools to study informal collaboration and social capital
• Inform long-term plans for teachers' professional development
Tellnet: Approach

- **Identify networks** that have been effective in sharing practices
- Peer-support tools to study informal collaboration and social capital
- Inform long-term plans for teachers' professional development
eTwinning: Identify networks, hubs and communities

• Effective in sharing practices, encouraging innovation and creativity at schools, engaging new members
• Role of teachers, evolution of networks
• Network theories, Social Network Analysis and visualization techniques
• Teachers=nodes; Interactions=tides
eTwinning: Identify networks, hubs and communities

• Networks identified (e.g.)
  • Project collaboration network, ties are projects eTwinners have collaborated on
  • Contact list network, ties are the contacts eTwinners added to their contact-list
  • Messaging network, ties are the messages eTwinners exchanged
  • ...
### eTwinning: Project collaboration network

<table>
<thead>
<tr>
<th>Cluster size (N eTwinners)</th>
<th>N times identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>8807</td>
<td>1</td>
</tr>
<tr>
<td>3669</td>
<td>1</td>
</tr>
<tr>
<td>3175</td>
<td>1</td>
</tr>
<tr>
<td>1172</td>
<td>1</td>
</tr>
<tr>
<td>100-1000</td>
<td>9</td>
</tr>
<tr>
<td>10-100</td>
<td>136</td>
</tr>
<tr>
<td>2-9</td>
<td>2627</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2776</td>
</tr>
</tbody>
</table>
eTwinning: Identify networks, hubs and communities
eTwinning "network"
Tellnet: Approach

- Identify networks that have been effective in sharing practices
- **Peer-support tools** to study informal collaboration and social capital
- Inform long-term plans for teachers' professional development
eTwinning: Peer support

- Strong core group of participants but...
  - Majority are isolated

- Ad Hoc Transient Communities
  - Fosters social capital
    - Network is decentralized
  - Sense of community
  - Mutual support
eTwinning: Ad Hoc Transient Group

Teacher asks a question → Service finds peers → Private work space (Ad Hoc Transient Group) → Private space disbanded

Availability: # requests accepted vs. # requests accepted by all participants.

Content competency: Participants expertise subject(s) vs. question category

Language: Language of the question vs. participants languages

Wiki
Discussion forum
Chat
How do I start a project?

I have a question concerning the eTwinning Projects. I am still rather new here and I do not know where to begin to find partners and/or a project. Could you please give me some hints and tips on how to start?

Finding the right people to answer my question

<table>
<thead>
<tr>
<th>People</th>
<th>Matching Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person X</td>
<td>82</td>
</tr>
<tr>
<td>Person C</td>
<td>79</td>
</tr>
<tr>
<td>Person N</td>
<td>78</td>
</tr>
<tr>
<td>Person J</td>
<td>71</td>
</tr>
<tr>
<td>Person Z</td>
<td>65</td>
</tr>
<tr>
<td>Person M</td>
<td>65</td>
</tr>
<tr>
<td>Person D</td>
<td>55</td>
</tr>
<tr>
<td>Person K</td>
<td>54</td>
</tr>
</tbody>
</table>

Invite the selected people
How do I start a project?

I have a question concerning the eTwinning Projects. I am still rather new here and I do not know where to begin to find partners and/or a project. Could you please give me some hints and tips how to start?

Person A
Rating: 5/5
Posted 07-11-2009
Closed 27-10-2009

Person B
Rating: 3/5
Posted 25-10-2009

Person F
Rating: 5/5

Person G
Rating: 5/5

Question Title

Question

Answers and Communication Space

Question posted on 07-11-2009
Invitation sent to Person X
Invitation sent to Person N

Has the Question been answered satisfactory?
Yes - Close the Question
No - Resubmit the Question
No - Close the Question
eTwinning: Peer Support

• Tested with a select group of eTwinners, 3 months
  • Pre-questionnaire, sense of community (819); Rovai(2002)
  • 691 participants divided into 3 groups: AHTG, Forum, Control
  • Post-questionnaire (375: AHTG=103, Forum=118, Control=154)

• Influence of AHTGs tested on
  • Relationship Characteristics, Social Network analysis
  • Sense of Community, Questionnaire
  • Mutual Support: # questions asked, # answers given, ratio between them
Tellnet: Approach

• Identify networks that have been effective in sharing practices
• Peer-support tools to study informal collaboration and social capital
• Inform long-term plans for teachers' professional development
eTwinning: Inform long-term plans

- Aim: policy suggestions for policy makers
- Scenario building method
  - Analyze possible future events considering alternative scenarios
- Stages for achieving expected impacts
  1. Understand the current situation
  2. Exploring what could happen
  3. Debating with stakeholders what they would like to happen
  4. Deciding what should happen
eTwinning: Inform long-term plans

• Validation workshops: teachers, experts, policy makers
• Creation of personas (e.g.)
  • Maria the enthusiast
  • Peter the networker
  • Shuan the lurker
  • ...
• Creation of future scenarios for eTwinning in 2025
  • European educational network (network of networks)
  • My network (identity management system)
  • Intelligent agents
  • Digital mentor
  • Offline networking
Conclusions

• eTwinning as a case study: potential of teacher's social networks to support and sustain teacher's professional development

• Tellnet: using novel approaches

• Social Network Analysis

• Peer-support mechanisms

• Future scenario forecasting
Questions?
adriana.berlanga[at]ou.nl

www.tellnet.eun.org