

# Social media adoption in higher education

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# Content

- Pedagogical point of view
- Technological point of view
- Our survey
- Strategy suggestion
  - Some useful tools

# Pedagogical point of view

- Theories affecting social media adoption
  - Constructivism
    - A human is an active actor. He/she learns through
      - Brainstorming
      - Social interaction
  - Connectivism

# Pedagogical point of view/Constructivism

- Cognitive constructivism
  - A human constructs understanding through many channels: reading, listening, exploring and experiencing his or her environment (Piaget, 1977).

# Pedagogical point of view/Constructivism

- Social constructivism
  - Emphasizing the influences of cultural and social contexts in learning and supports a discovery model of learning - Vygotsky (1978)

# Applying constructivism in web-learning (phases)

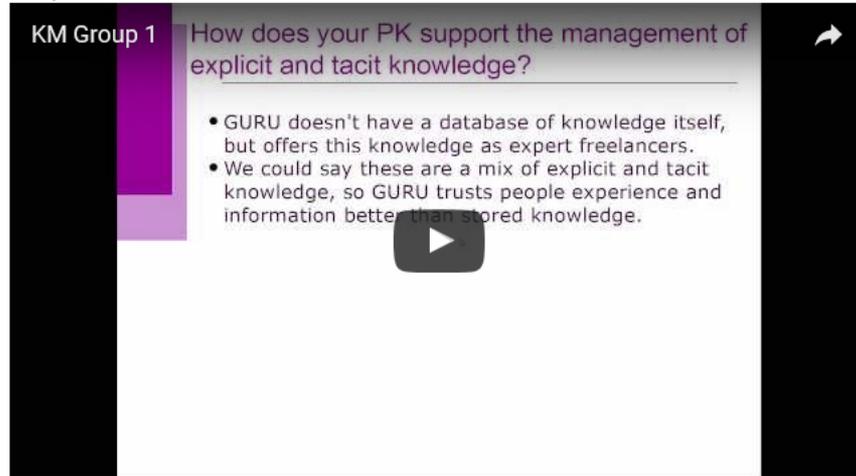
- An assignment
  - Video producing using a screen-capture-video tool
  - Publishing this video on coursewiki
  - Familiarizing with the videos produced by others and commenting on the videos

# Example

## Publishing video

- Click on the edit button above to put your own content on this page. Put your video here

### • Group 1



- Ezequiel [redacted]
  - Álvaro [redacted]
  - Juan José [redacted]
  - Juan Manuel [redacted]
- ### • Comments from Group 3

- Jesús [redacted]: I've discovered Guru, a tool that enables me to find experienced professionals in different areas, if I need to hire someone to make a project for me. I think it would've been interesting if the someone in the website to see how it works.
- Lucía [redacted]: I have learned Guru is a good tool to find another way to improve your knowledge about the projects of different companies. Also, you can look for companies or groups of people who are in
- Alberto [redacted]: I've learnt that Guru is very important because you can to post your project and many companies will see this project and then they will hire you.
- José Antonio [redacted]: I've learnt that Guru, it's a company to hire and manage freelance developers and you can see projects of different companies too and to look for people who are interested in your p

# Applying constructivism in web-learning (results)

- The main finding of this study is that the wiki-based e-learning approach supports the effective knowledge building (**good learning results**) rather than the enjoyable learning experience with high motivation.
- Second result was that knowledge creation (producing videos) was more significant part compared to watching others' videos and commenting these

# Pedagogical point of view/Connectivism 1

- Connectivism was born from the criticism of the learning theories of the 90s. Siemens (2005) has listed these problems:
  - Learning is not linear process anymore.
  - More humans' cognitive operations are performed by devices.
  - Technology ecosystems develop rapidly.
  - Performance is needed to complete understanding.
  - The impact of networks and complexity to learning.
  - The impact of chaos on learning.
  - The impact of interconnections between fields on learning.

# Pedagogical point of view/Connectivism 2

- Based on this problem list the key principles of connectivism have been created (Siemens, 2005). These principles are as follows:
  - Learning is based on different views.
  - In learning humans aggregate information from different sources.
  - Learning should occur in nonstop manner.
  - Learning improves an ability to make connections and vice versa
  - Accuracy of knowledge improves learning.
  - Decision-making as a part of learning process.
- According to Siemens (2005), one implication of connectivism is that it should have its implication to the design of learning environments.
- According to <http://www.learning-theories.com/>, MOOCs (Massive Open Online Course) comes from connectivist theory

# MOOCs according to connectivism

- Student's view
  - Students are responsible what they learn and how they share learning
- Facilitator's view
  - Guiding learning

# Technological point of view

- SoMe doesn't work always
- Threats of social media use
  - Davis, Deil-Amen, Rios-Aguilar, Gonzalez Canche (2012)
- Promises of social media technology
  - Davis, Deil-Amen, Rios-Aguilar, Gonzalez Canche (2012)

# Sometimes SoMe works sometimes it doesn't

- Seaman and Tinti-Kane (2013) has studied the use of social media in teaching and learning.
  - The positive impact on learning communities is significant based on the volume of social media use. Especially, blogs and wikis have affected teaching activities notably
  - On the other hand podcasts, LinkedIn, Facebook and Twitter are less significant (Seaman and Tinti-Kane, pp. 7-9)

# Threats in social media use

Davis, Deil-Amen, Rios-Aguilar, Gonzalez Canche (2012)

- The use of social media for non-academic matters
- Limitations in providing useful information
- Too much optimism
  - The students must have a reason to follow SoMe
- You don't personalize the content based on a user's profile
- Lack of engaging elements
- Privacy
  - Students' privacy behavior seems to be similar in the same communities
  - A student's privacy policy depends on their friends
- Ambiguity about norms when new services released
- Gap between students and teachers
  - Digital natives enter high education institutions

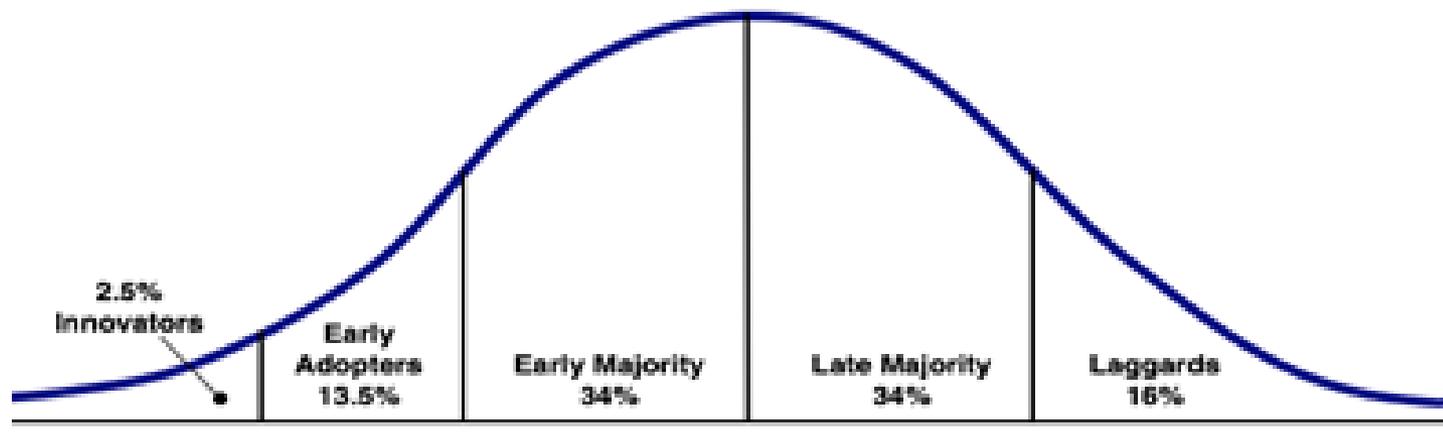
# Promises of social media technology

- Engagement
- Data collection
- Social networks
  - Improving post-colleges life to get hired
- Stakeholders can meet
  - Career and study counselling
- Short study programs
  - SoMe helps in engagement
  - It is especially important

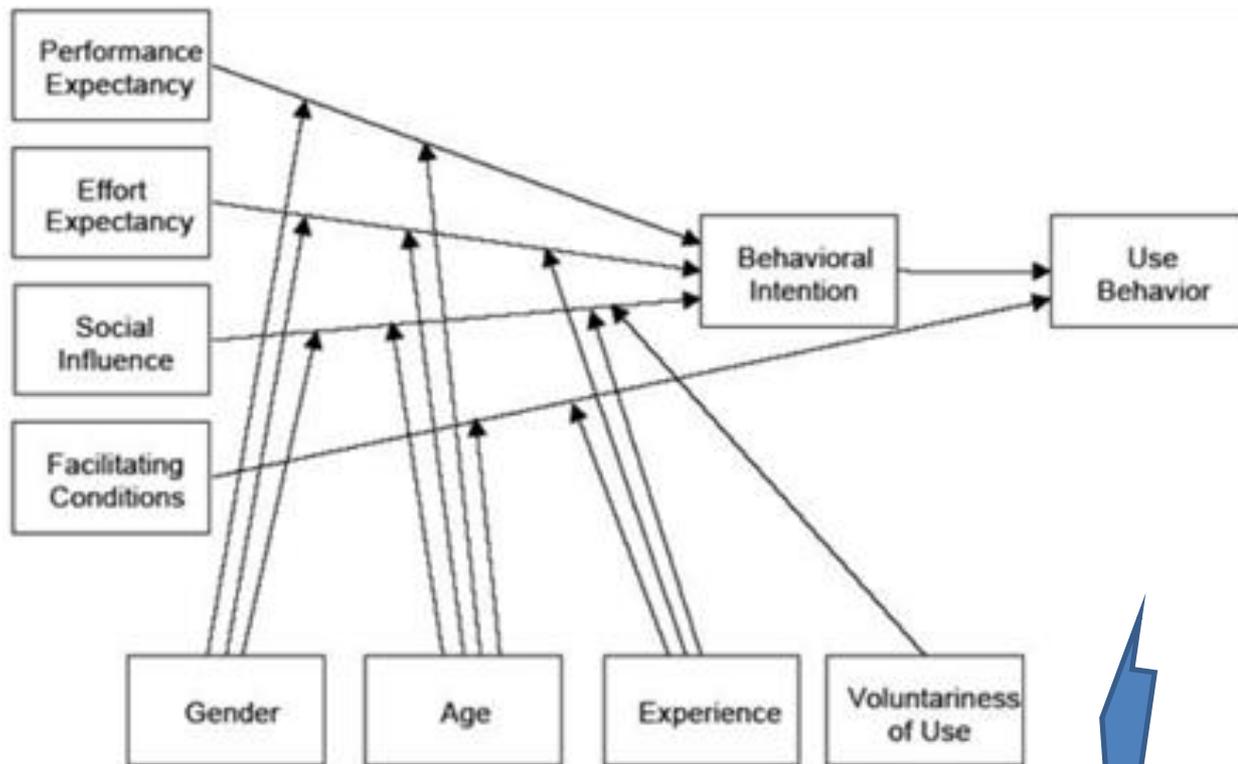
# Our survey

- Three papers published/will be published
  1. What promotes the adoption of social media in the teaching of IS/ICT and what constrains it? - Students' perspective - presented at DSI 2015 annual meeting
  2. Adoption of social media in the teaching of IS/ICT: Comparing students to faculty members – presented at SITE 2016 conference
  3. Adoption and use of social media in learning and teaching -A cross cultural case study – to be presented at ED Media 2016

# Technology adoption in general



# Technology adoption according to Venkatesh et al. (Unified model)



Variables affecting  
Technology adoption

# 1) What promotes the adoption of social media in the teaching of IS/ICT and what constrains it? - Students' perspective-DSI 2015 annual meeting (1)

- Question

- What do the students see as promoting and constraining things in social media use in learning?

- Survey

- In total 71 Information Systems students, 20 females and 51 males, whose mean age was 25 years (range 19-57 years) completed the questionnaire. The respondents rated each item of social media use on a scale of 1 to 5 where (1= not significant and 5=significant).

# 1) What promotes the adoption of social media in the teaching of IS/ICT and what constrains it? - Students' perspective-DSI 2015 annual meeting (2)

- Results

Table 1: Frequencies

Factor	1	2	4	4	5	6
	Experience in the use of social media	Voluntariness in the use of social media	The effect of infrastructure on the use of social media	The effect of social influence on the use of social media	The effect of the ease of use on the use of social media	The effect of the help to work or study on the use of social media
	3.65	3.72	4.24	4.04	3.96	3.33

## 2) Adoption of social media in the teaching of IS/ICT: Comparing students to faculty members-SITE 2016 conference (1)

- Question

- Comparing the students' opinions to the faculty members' opinions

- Is there difference?
- Are there gaps?

- Survey

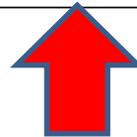
- In addition to the students, we included total 32 IT faculty members with teaching responsibilities, 9 females and 23 males, whose mean age was 41 years (range 27-64 years) completed the questionnaire.

## 2) Adoption of social media in the teaching of IS/ICT: Comparing students to faculty members-SITE 2016 conference (2)

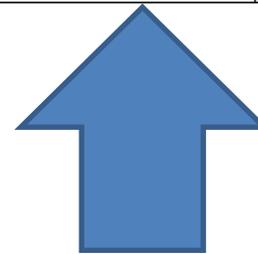
- Results

Table 1: Frequencies

Factor	Experience in the use of social media	Voluntariness in the use of social media	The effect of infrastructure on the use of social media	The effect of social influence on the use of social media	The effect of the ease of use on the use of social media	The effect of the help to work or study on the use of social media
Students	3.65	3.72	4.24	4.04	3.96	3.33
Faculty members	3.38	3.38	4.50	3.41	3.75	3.06



Most important factor



Gap

Educators should keep this in mind especially!

### 3) Adoption and use of social media in learning and teaching -

#### A cross cultural case study (1)

- Mission and question
  - We compare data collected from two universities one from Finland and one from Greece.
- Results
  - In both countries infrastructure issues were important
  - Secondly, the students in Finland appreciated the meaning of social influence and the easiness of application more than Greek students.

### 3) Adoption and use of social media in learning and teaching -

#### A cross cultural case study (2)

- Discussion

- We can look at the results in the light of Hofstede's Individualistic-Collectivistic values approach

- In collectivistic cultures (Greece) people appreciate group harmony and consensus, while in individualistic cultures (Finland) people value freedom, self-reliance and independence
  - Greece: family and friends (so called in in-group), whose opinions play an important role for the individual
  - Finland: Finnish students need more support from out-group on social media
- Social media seems to be more effective in individualistic culture

# Strategy suggestion 1

- **11 Best-In-Class Strategies for Social Media in Higher Education**
  - By Michael Patterson on February 4, 2016
  - <http://sproutsocial.com/insights/social-media-in-higher-education/>
  - Choosing your social networks (1-3)
  - **1. Quality of Network Presence Over Quantity**
    - Social media demographics
      - For example Facebook
        - <https://www.facebook.com/business/news/audience-insights>
  - **2. The Best Social Network Depends on Audience**
    - This point is connected to point 3

# Strategy suggestion 2

- **3. Make Sure to Test Newer Networks**
  - Again demographics are important
- **Structuring your social media accounts (4-6)**
- **4. Deciding Who Owns Social Media**
  - Deciding about teams in your organization
- **5. Educate Other Departments on Social**
  - Evangelists team
- **6. How to Tell If a Department Needs a Social Presence**
  - Should my own department need a social media site?
    - Discuss it with the staff members

# Strategy suggestion 3

- **Creating and sharing social content (7-8)**
- **7. Leverage Timely Content**
- **8. Utilize Social to Promote Institutional Research**
  - **Professors should be prepared to tell about their research on SoMe in “sexy” ways**
- **Providing the value of social media (9-10)**
- **9. Pull Data on a Weekly, Monthly & Semester Basis**
- **10. Audience Growth & Engagement Are Solid KPIs**
  
- **A tool supporting this:**
  - <http://sproutsocial.com/features/social-media-analytics>**
  - <https://www.youtube.com/watch?v=svSYSdqJzUI>**

# Claned start up a tool supporting previous?

The screenshot shows a web browser window with the URL <https://app.claned.com/#/feed>. The browser's address bar and menu are visible at the top. Below the browser, the Claned website interface is shown. At the top right, there is a user profile for 'Pekka Makkonen' with two notification icons. The main content area features a large background image of a mountain range. In the center, the text 'Welcome to CLANED' is displayed, followed by the tagline 'Your personal learning path'. Below this, a modal window titled 'HOW CLANED® WORKS' is open, containing three numbered steps:

- 1 PUBLISH AND ORGANIZE YOUR LEARNING CONTENT**  
Keep the best learning content with you all the time  
Upload or publish from websites  
Create and share boards to collaborate with your friends and fellow learners
- 2 STUDY AND GET SUPPORT FROM YOUR PEERS**  
Say goodbye to lonely nights with books  
CLANED® makes learning interactive and social.  
Discuss, ask help and solve problems together with your friends. And have fun while your at it!
- 3 TRACK AND LEARN HOW YOU LEARN**  
Know your strengths and learn where to improve.  
CLANED® learns how you learn and knows how to support you with your studies.

At the bottom of the modal, there is a 'GET STARTED NOW!' section with a prominent blue button labeled 'CREATE YOUR FIRST BOARD'. Below the modal, a navigation bar shows 'YOUR CONTENT:' followed by 'Invited boards (0)', 'My boards (0)', and 'Followed (0)'. At the bottom right of the modal, there is another button labeled 'CREATE A BOARD+'. The Windows taskbar is visible at the very bottom of the image, showing various application icons and the system tray with the date and time '7:13 12.4.20'.

# Claned - what?

- Claned analyzes what affects learning
  - [www.claned.com](http://www.claned.com)
  - app.clanded.com for testing
- Such as in conventional e-learning environments you can upload and create content, but in Claned you can create personal learning paths and analytics such as in sport tracker apps – Talouselämä business weekly April 8, 2016

# Claned analytics

https://app.claned.com/#/board/pekkatestpub1/articles

File Edit View Favorites Tools Help

My feed | All boards | Search boards

Pekka Makkonen

## PekkaTestPub1

EDIT

Board description | Board analytics | Enter study mode

Select report type and the timeframe to view analytics

Start: 12.04.2016 End: 12.04.2016

- Study time
- Study frequency
- Accumulated study time
- Topic Group
- Content Challenge Group
- Challenge Evolution Group
- Interactions
- Commenting
- Learning orientation

By students

TIME (min)

# In addition free monitoring services

- Can be useful for monitoring and planning the next steps. One list of the tools is as follows (Turban et al. (2015) IT for management)
  - Social mention
    - <http://www.socialmention.com/about/>
  - Twitter search
    - <https://support.twitter.com/articles/132700#>
  - Klout
    - <https://klout.com/home>
    - Klout score: <https://klout.com/corp/score>
  - Google alerts
    - <https://support.google.com/alerts/answer/4815780?hl=en>
  - Google analytics