

# 促进协作学习的Web2.0应用与实践

2015年12月21日

杜静

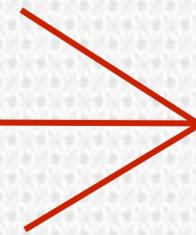
支持Web2.0应用的理论基础

Web2.0相关研究

协作学习与Web2.0应用缺失了什么？



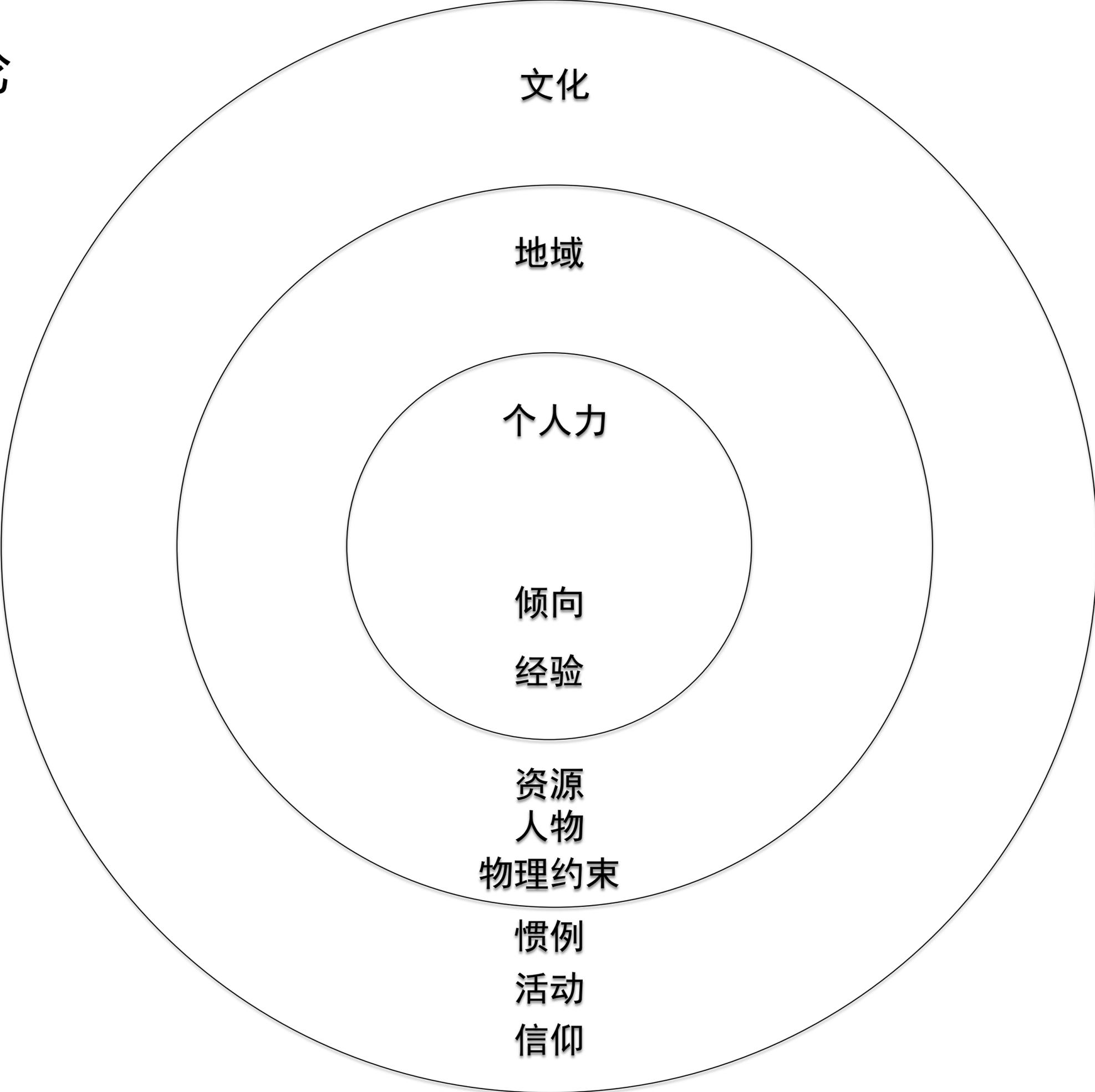
支持Web2.0应用的理论基础



# 理论基础



# 分布式认知理论



# 社会文化理论（维果斯基）



强调人际交往的关键性作用，人际交往可以通过各种手段实现，这些手段包括文化客体（机器等）、语言以及可以促进发展和学习的社会机构（学校等）。

# 情境认知理论



真实有意义的情境下的学习和实践。通过分享知识和经验，实践社群会形成与参与者研究领域或兴趣相关的知识，这正是学习者进行个人学习所缺乏的。

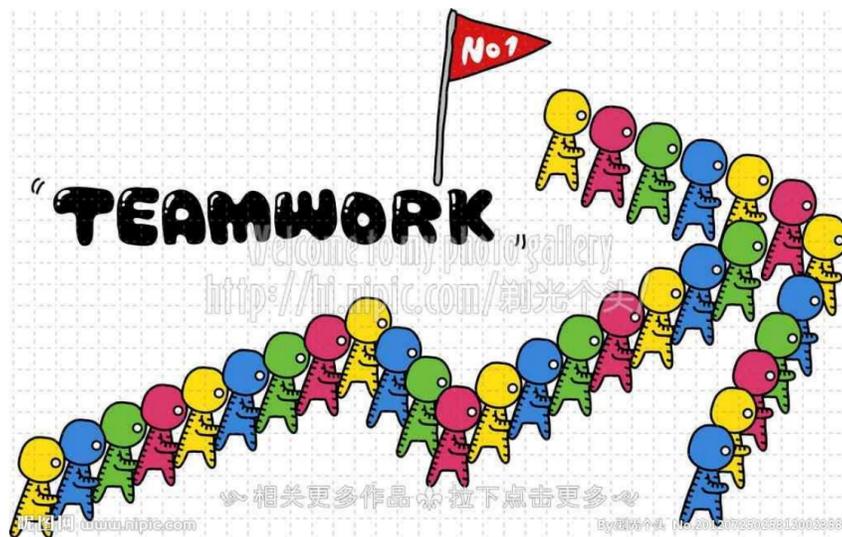
# 一个基于技术的协作平台的特点



有利于增强社群成员之间  
多层次的灵活沟通与互动



在学习过程中允许通  
过各种方式交换思想



允许学习者一起创造产品并  
构建相互的工作和进程

web1.0

web2.0

Creation

Delivery

Management



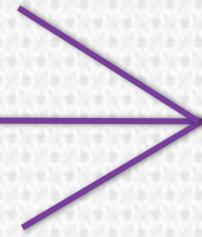
web3.0

Aggregators Folksonomy Wikis User-Centered Joy of Use  
Blogs Participation Six Degrees Usability Widgets  
Pagerank XFN Social Software FOAF Browser  
Recommendation Sharing Collaboration Perpetual Beta Simplicity AJAX  
Videocasting Podcasting Audio IM Video Design  
Convergence CSS Pay Per Click  
UMTS Mobility Atom XHTML SVG Ruby on Rails VC Trust Affiliation  
OpenAPIs RSS Semantic Web Standards SEO Economy  
OpenID Remixability REST Standardization The Long Tail  
DataDriven Accessibility Microformats Syndication XML  
Modularity SOAP



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相关研究



# 近期Web2.0教育实践研究

**Table 60.1** Recent research on Web 2.0 educational practices

Web 2.0 educational practices	Web 2.0 applications	Research reviewed in this chapter (listed in alphabetical order by practice)
Publishing and sharing learning progress and achievement	Blogs	<ul style="list-style-type: none"> <li>• Chuang (2010)</li> <li>• Ellison and Wu (2008)</li> <li>• Ladyshevsky and Gardner (2008)</li> <li>• MacBride and Luehmann (2008)</li> <li>• Sharma and Xie (2008)</li> <li>• Shoffner (2009)</li> <li>• Tan et al. (2005)</li> <li>• Xie et al. (2008)</li> </ul>
Supporting and achieving collaborative tasks	Blogs	<ul style="list-style-type: none"> <li>• Fessakis et al. (2008)</li> <li>• Philip and Nicholls (2009)</li> </ul>
	Wikis	<ul style="list-style-type: none"> <li>• Vratulis and Dobson (2008)</li> <li>• Wheeler et al. (2008)</li> </ul>
	Collaborative documents and concept mapping	<ul style="list-style-type: none"> <li>• Ching and Hsu (2011)</li> </ul>
Making thinking, collaborative processes and products visible through tangible artifacts	VoiceThread	<ul style="list-style-type: none"> <li>• Augustsson (2010)</li> </ul>
	Wikis	<ul style="list-style-type: none"> <li>• Elgort et al. (2008)</li> <li>• Zorko (2009)</li> </ul>
Communicating ideas and disseminating artifacts with multimedia capacity	Video sharing (YouTube)	<ul style="list-style-type: none"> <li>• Haase (2009)</li> <li>• Burnett (2008)</li> <li>• Burke and Snyder (2008)</li> </ul>
	Microblogging (Twitter)	<ul style="list-style-type: none"> <li>• Hsu and Ching (2011)</li> </ul>
Social networking in authentic learning environments	Social networking (Facebook)	<ul style="list-style-type: none"> <li>• Kabilan et al. (2010)</li> </ul>
Building communities of practice for learning in authentic and meaningful contexts	Blogs	<ul style="list-style-type: none"> <li>• Luehmann and Tinelli (2008)</li> </ul>
	Social bookmarking (Diigo)	<ul style="list-style-type: none"> <li>• Tu et al. (2008)</li> </ul>

# 发布与分享学习进展和成绩



发布和分享学习日志  
对于促进学习者**个人反思**很有帮助

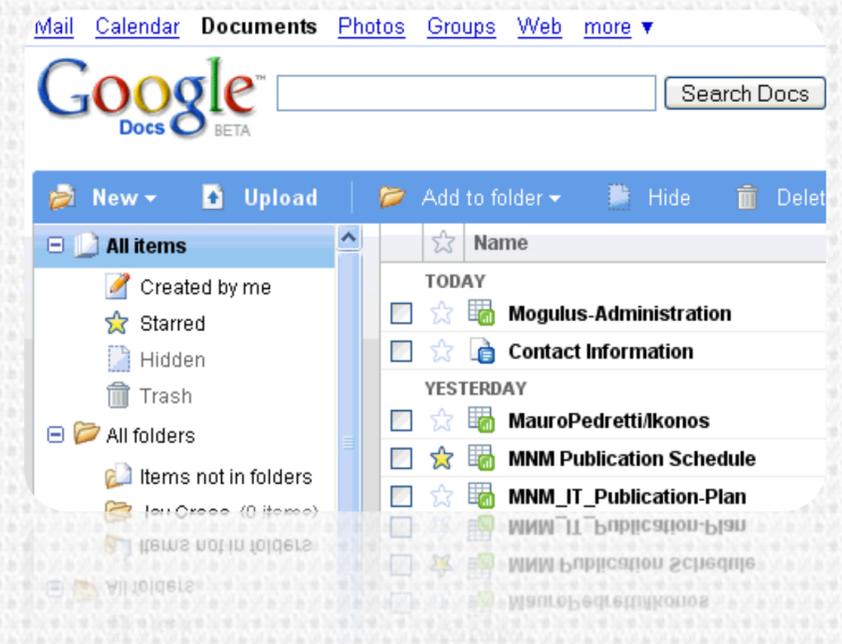


电子档案袋  
多媒体的内容呈现方式  
多是**关于定性**的研究

# 支持和完成协作任务



协同编辑页面，并对“页面历史”回溯，促进教师和学生批判思维的养成



协作文档，如Google DOCS



利用群博客支持学生协作学习、  
教师协作备课、教师协作设计  
学习活动

# 通过有形人工制品使思考、协作流程和产品可视化



- Main page
- Contents
- Featured content
- Current events
- Random article
- Donate to Wikipedia
- Wikipedia store
- Interaction
  - Help
  - About Wikipedia
  - Community portal
  - Recent changes
  - Contact page
- Tools
  - What links here
  - Related changes
  - Atom
  - Upload file
  - Special pages
  - Page information

Not logged in | Talk | Contributions | Create account | Log in

Article | Talk | Read | Edit | New section | View history | Search

## Talk:Oil painting: Revision history

[View logs for this page](#)

Browse history

From year (and earlier):  From month (and earlier):  Tag filter:

For any version listed below, click on its date to view it. For more help, see [Help:Page history](#) and [Help:Edit summary](#).

External tools: [Revision history statistics](#) · [Revision history search](#) · [Edits by user](#) · [Number of watchers](#) · [Page view statistics](#)

(cur) = difference from current version, (prev) = difference from preceding version, m = minor edit, → = section edit, ← = automatic edit summary  
(newest | oldest) View (newer 50 | older 50) (20 | 50 | 100 | 250 | 500)

- (cur | prev)  03:01, 10 December 2013 YpnBot (talk | contribs) m . . (11,822 bytes) (+44) . . *(added [[Vital article]])* (undo)
- (cur | prev)  15:34, 17 April 2013 Faizanalivarya (talk | contribs) . . (11,778 bytes) (-1) . . (undo)
- (cur | prev)  08:08, 28 March 2013 SineBot (talk | contribs) m . . (11,779 bytes) (+300) . . *(Signing comment by 103.13.88.215 - →Link to Dutch 'Olieverf' is missing on the English page: new section)* (undo)
- (cur | prev)  08:07, 28 March 2013 103.13.88.215 (talk) . . (11,479 bytes) (+293) . . *(→Link to Dutch 'Olieverf' is missing on the English page: new section)* (undo)
- (cur | prev)  01:00, 28 January 2012 SineBot (talk | contribs) m . . (11,186 bytes) (+302) . . *(Signing comment by 69.235.18.240 - →Can there be an explanation of what is meant by Buddhist paintings - and a citation?: new section)* (undo)

可以很容易评估学生的贡献，这种可视化的方式有利于激励或督促参与者的学习，提高在任务中的活跃度

Voice Thread

# 通过多媒体功能进行思想交流和人工制品传播

The screenshot displays a Blackboard course interface. On the left is a navigation menu with options: Materials, Updates, Gradebook, Badges, Attendance, Members, and Analytics. Below this menu is an 'Access Code' box containing 'BJKSD-XNW93' and a 'Reset' button. The main content area features a discussion post titled 'Prof. Nian-Shing Chen's paper "Embodied play to learn: Exploring Kinect-facilitated memory performance"'. The post includes a PDF attachment named 'NSChen\_Paper.pdf' (106 KB) with a 'VIEW' link. Below the post is a 'Write a comment' text area. A 'Highlight User' dropdown menu is set to 'Highlight User', showing '36 Posts' and '1' comment. A comment from 'Qianqian Chen' (Sat Nov 7, 2015 at 10:37 am) is visible, discussing the paper's content. Below the comment are 'Like · Reply' and 'Hide 1 reply' options. A partial comment from 'Nian-shing Chen' (Sun Nov 8, 2015 at 7:33 am) is also visible at the bottom.

学生可以展示自己学习的知识和思考

# 真实学习环境中的社交网络



有研究表明，FaceBook上的学生们，可以容忍“语言错误”，这是鼓励实践。

Web2.0的这种环境是对缺乏丰富交互的正式学习环境的一种改善

此种社交网络可以锻炼学生的**写作和阅读能力**

# 在真实且有意义的环境中创造学习实践社群



学习社群将将有共同兴趣的人聚集到一起



协作学习与Web2.0应用：缺失了什么



# 支持知识建构、意义协商、共同目标



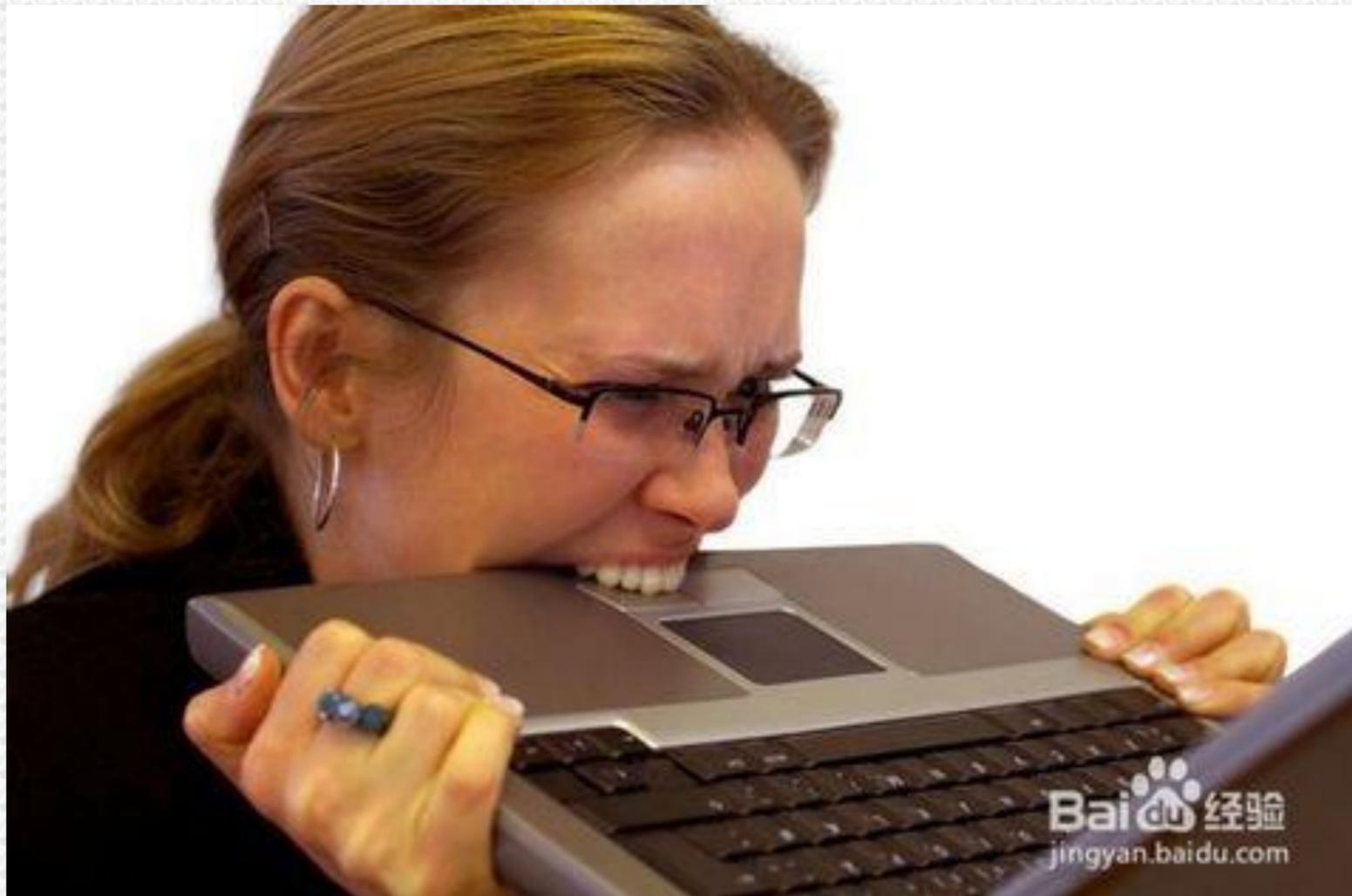
- Kerawalla发现如果没有要求学生同伴的博客提供意见，那么学生就经常不会这样做
- Zoo发现学生并不太喜欢利用协作工具进行交流，反而更加喜欢即时通讯工具、移动电话或邮件
- 有一项研究关于学生如何利用Wiki进行协作学习，结果发现学生只是单独完成各自的任  
务，并没有意见交流来交流如何衔接他们创作的页面
- 能够成功进行意义协商，并共创知识的小组并不多见

# 知识的共建与写作的情感特性



- 学生不喜欢同伴改变自己的协作，因为他们战队自己的作品“很满意”
- 学生在编辑别人的作品时会感到不适，因为编辑可能被看做是粗鲁或冒犯的行为
- 有研究者车数了这种复杂性，主要包括**权威危机、关系危机和危机解决**

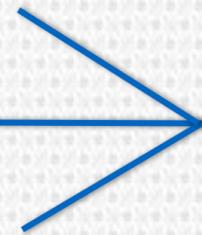
# 利用技术性能与实现理想学习之间的平衡



- Web2.0提供各种特性，如协作编辑、语音评论等，但是有的学生并未达到他们必备的技术能力，这可能会错过利用技术进行学习或交流的机会

4

未来研究方向



移动Web2.0  
协作学习

协作视频编  
辑

学习者情感

Thanks !

