# MEETING OF THE ACADEMIC TECHNOLOGY COMMITTEE
## Thursday, September 24, 2015
## 2:00 – 3:30 p.m.
## Room LL 104
## A G E N D A

I. CALL TO ORDER

II. ACTION

A. Approve minutes

B. New Business (*please see attached files*)
1. DE Policy Meta Analysis
2. Class Size
3. Canvas Pilot
4. Other

III. INFORMATION
A. SDICCCA-DE: Teacher Preparation Pipeline Grant
B. OEI News
C. 2015 Distance Learning Summit, Oct 9, SDCC/NCC
D. Other

IV. ANNOUNCEMENTS

V. MEETINGS: (LL 104) 2:00 – 3:30 pm / 2nd, 4th Thursdays

**10/8**
**10/22**
**11/12**

VI. ADJOURNMENT

Bartulis, Mike
Burgher, Ron
Dozier, Deborah
Estes, Matt
Feld, Erin
Forney, Marlene
Goldsmith, Sherry
Hill, Amanda
Martin-Klement, Jackie
Morrow, Linda
Payn, Lillian
Perry, Steve
Pouladdej, Alix
Rypien, Krystal

***Note: our Committee Site with Documents***
**http://www2.palomar.edu/pages/academic-technology-committee/**

See Supporting Documents for the requested document:
Digital Information Literacy Assessment Recommendations

1. DE Policy Meta Analysis
2. Class Size
3. Canvas Pilot

N*ote: The following files are not in any particular order. Thank you for your contributions to this research!*

## DE POLICY META ANALYSIS

## PALOMAR COLLEGE CURRENT DE POLICY:
(Note that this is not a Board Policy, but a Curriculum Policy from the Curriculum Committee/Instruction Office, based on Title 5)
http://www2.palomar.edu/pages/curriculum/files/2012/11/Regular-Effective-Contact-Policy-Final.pdf

**Palomar College Instructor/Student Contact Policy for Distance Learning Courses Background:**

In hybrid or fully online courses, ensuring **regular effective contact** guarantees that the student receives the benefit of the instructor's presence in the learning environment both as a provider of instructional information and as a facilitator of student learning. In a face-to-face course the instructor is present at each class meeting and interacts via all class announcements, lectures, activities and discussions that take a variety of forms. For example, discussions can be held as part of a lecture format, group work scenarios, or content review sessions. The instructor also serves as a content advisor when he or she answers questions both as they come up in class and as they arise in individual situations. These types of questions are dealt with via the telephone, email, or face-to-face office visits.

Title 5 regulations do not make a distinction between regular and distance education courses beyond the need to have a separate curriculum approval process and the need to ensure regular effective contact. Therefore, it is assumed that those qualities of regular effective contact described above for the face-to-face environment should also be applied to the distance education situation. The distance education guidelines require colleges to develop a policy regarding regular effective contact that addresses "the type and frequency of interaction appropriate to each distance education course/section or session".

**Palomar College Policy:**

All distance education courses at Palomar College, whether hybrid or fully online will include regular effective contact as described below:

1. **Initiated interaction and frequency of contact**: Instructors will regularly initiate interaction with students to determine that they are accessing and comprehending course material and that they are participating regularly in the activities in the course. Distance education courses are considered the "virtual equivalent" of face-to-face courses. Therefore, the frequency of the contact will be at least the same as would be established in a regular, face to face course. At **the very least**, the number of instructor contact hours per week that would be available for face-to-face students, will also be available, in asynchronous and/or synchronous mode, with students in the distance education format. Contact shall be distributed in a manner that will ensure that regular contact is maintained, given

the nature of asynchronous instructional methodologies, over the course of a week and should occur as often as is appropriate for the course.

2. **Establishing expectations and managing unexpected instructor absence:** An instructor and/or department established policy describing the frequency and timeliness of instructor initiated contact and instructor feedback, will be posted in the syllabus and/or other course documents that are made available for students when the course officially opens each semester. If the instructor must be out of contact briefly for an unexpected reason (such as illness or a family emergency that takes the instructor offline), notification to students will be made in the announcements area of the course that includes when the students can expect regular effective contact to resume. If the offline

Recommended by the Distance Learning Subcommittee 11/10/2009 (Adapted from Mt. San Jacinto College) Curriculum Committee Approval 11/18/2009
Faculty Senate Approval 11/30/2009
Effective 2010-2011 Academic Year

time results in a lengthy absence (a week or more), a substitute instructor should be sought who can assist students while the instructor is unavailable.

3. **Type of Contact**: Regarding the type of contact that will exist in all Palomar College distance learning courses, instructors will, at a minimum, use three or more of the following resources to maintain contact with students:

1. Website announcements
2. Participation in a threaded discussion board
3. Participation in an open-ended discussion board
4. Opportunity for questions and answers in a chat room
5. Email contact
6. Participation in online group collaboration projects
7. Face-to-face informal meetings (e.g. review sessions)
8. Face-to-face formal meetings (e.g. regular, scheduled class sessions)
9. Teacher response to student work in progress
10. Regular podcasts
11. Voice enabled messages (e.g. Voice Boards or voice email)
12. Synchronous virtual meetings
13. Other

Recommended by the Distance Learning Subcommittee 11/10/2009 (Adapted from Mt. San Jacinto College) Curriculum Committee Approval 11/18/2009
Faculty Senate Approval 11/30/2009
Effective 2010-2011 Academic Year

## Palomar Community College District Procedure AP 4105 INSTRUCTIONAL SERVICES

http://www.palomar.edu/GB/Procedures%20-%20Administrative%20-%20Final/Chapter%204%20AP/AP%204105%20Distance%20Education%20SPC%20approved%205-15-12.pdf

## AP 4105 DISTANCE EDUCATION References:

Title 5 Sections 55200 et seq.

### Definition

Distance education means instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology.

**Course Approval**

Each proposed or existing course offered by distance education shall be reviewed and approved separately. Separate approval is mandatory if any portion of the instruction in a course or a course section is designed to be provided through distance education.

The review and approval of new and existing courses offered through distance education shall follow the curriculum approval procedures outlined in AP 4020 titled Program and Curriculum Development.

**Certification**

When approving courses to be offered though distance education, the Curriculum Committee will certify the following:

• **Course Quality Standards:** The same standards of course quality are applied to the courses offered through distance education as are applied to traditional classroom courses. Areas that are part of the Distance Education Review process include:

- StudentAccesstoResources
- Student Services
- InterventionandRemediationRecommendations
- Test Security
- AcademicIntegrity

• **Course Quality Determinations:** Determinations and judgments about the quality of the course offered through distance education are made with the full involvement of the Curriculum Committee.

• **Instructor Contact:** Each section of the course that is delivered through distance education will include regular effective contact between instructor and students.

**Date SPC Approved: 5/15/2012**



## Palomar Community College District Procedure AP 4105 • Accessibility Standards:

Electronic course materials, e-textbooks, websites, and

course packs must be accessible to individuals with disabilities.

Validation of preparedness to teach online may be determined in one or more of the following ways:

- Evidence of successful completion of the “Online Preparedness Training at Palomar” series of workshops
- Evidence of coursework, certificates, and/or degrees that focus on online teaching which were completed at other accredited higher education institutions
- Evidence of a successful evaluation of the course with the “Online Best Practices Checklist”

**Duration of Approval**

All courses offered through distance education approved under this procedure will continue to be in effect unless there are substantive changes of the course outline.

Office of Primary Responsibility: Faculty Senate and Instruction Office

**Date SPC Approved: 5/15/2012**

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http://www2.palomar.edu/pages/curriculum/files/2012/11/Regular-Effective-Contact-Policy-Final.pdf

https://www.faccc.org/

http://www.westga.edu/~distance/ojdla/spring61/levy61.htm

Faculty guidelines from Michigan CC
http://www.mccvlc.org/~staff/content.cfm?ID=108

http://www.nyu.edu/classes/jepsen/whatsthedifference.pdf

http://www.cvcc.vccs.edu/Distance%20Education/Faculty%20Resources/DistanceEdManual.pdf

http://senate.ucsd.edu/media/71324/Remote-and-Distance-Instruction.pdf

http://www.augustatech.edu/documents/Distance_ED_policy_manual.pdf

https://berkeleycollege.edu/files_bc/Distance_Learning_Policy.pdf

https://www.miracosta.edu/officeofthepresident/board/downloads/4105AP-DistanceEducation-Effective1-19-10Revised6-18-13_003.pdf

http://www.cvcc.vccs.edu/Distance%20Education/Faculty%20Resources/DistanceEdManual.pdf

http://www.grcc.edu/distancelearningandinstructionaltechnologies/teachingonline/distancelearningpoliciesstandardsquality

http://www.pasadena.edu/ipro/policies/documents/DistanceEducationPolicy3230DE10411.pdf

http://www.westga.edu/~distance/ojdla/fall173/keil_brown173.html

- Southeasterjn Louisiana State University:

https://www.southeastern.edu/resources/policies/assets/distance_education.pdf

Augusta Technical College: This a rather detailed document that includes student evaluations to assess outcomes at the completion of an online course.
http://www.augustatech.edu/documents/Distance_ED_policy_manual.pdf

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CLASS SIZE
PALOMAR COLLEGE CURRENT Class Size POLICY:
http://www.palomar.edu/GB/Web%20Pages/Policies%20-%20BPs%20-%20Board%20Policies/BPChapter4.html

**PALOMAR COMMUNITY COLLEGE DISTRICT POLICY BP 4675 INSTRUCTIONAL SERVICES**

**BP 4675 CLASS SIZE Reference:**

No references

Class size (course minimums and maximums) shall be determined through negotiations between the District and the Palomar Faculty Federation (PFF).

**Date Adopted: 11/10/2009** *(Replaces current Palomar College Policies 309 and 309.1)*

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- "Class Size and Interaction in Online Courses"
  http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=22941927&site=ehost-live&scope=site
- "A Framework for Evaluating Class Size in Online Education"
  http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=70303053&site=ehost-live&scope=site
- "Does Class Size Matter?"
  http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=103007655&site=ehost-live&scope=site

Student research paper that might have sources that could be useful http://files.eric.ed.gov/fulltext/ED529663.pdf

http://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=a580625d-5f61-48da-b859-b9bd9fe820a3%40sessionmgr4005&vid=

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4394939/

Not positive this has class size, but I couldn't skim more to see:
http://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=7d6b2ec2-3d0f-473b-b9a0-19babf30f007%40sessionmgr4003&vid=

https://www.insidehighered.com/views/2013/01/29/essay-importance-class-size-higher-education
http://wps.prenhall.com/wps/media/objects/4512/4621309/Survey_Online_Class_Size.pdf

http://eric.ed.gov/?id=ED529663

http://wps.prenhall.com/wps/media/objects/4512/4621309/Survey_Online_Cl

ass_Size.pdf

https://books.google.com/books?id=A0ECyUI-VkMC&pg=PA127&lpg=PA127&dq=online+class+size+best+practices&source=bl&ots=9RhwdnvA9G&sig=X_yvAJu5B38Hmu1i202qiM5zSJ8&hl=en&sa=X&ved=0CFoQ6AEwB2oVChMIr8PJ97LtxwIVAjuICh07MAp-#v=onepage&q=online%20class%20size%20best%20practices&f=false

http://www.sciencedirect.com/science/article/pii/S1096751609000736

http://link.springer.com/article/10.1007/s11412-012-9151-2

http://www.editlib.org/p/5626/

http://www.umsl.edu/technology/frc/pdfs/guidlines_for_good_practice_DL.pdf
http://www.fmtsystems.com/04-news/Impl-7-prin.pdf

From Grand Rapids CC in Michigan
http://cms.grcc.edu/distancelearningandinstructionaltechnologies/teachingonline/dlpoliciesstandardsquality0

This page to find that they cap classes at 22!
"ENROLLMENT CAPACITY
By GRCC Faculty Contract enrollment for online classes will be no greater than 22 students per section."

http://grcc.edu/sites/default/files/attachments/faculty_contract.pdf
This more current resource states:
"On-line Course Instruction
a. The enrollment for on-line classes will be no greater than twenty-three (23) students per
section.
b. If the administration requests a faculty member to overload an online class and the faculty
member accepts, the formula to determine the rate of pay for the additional student(s)
shall be as follows:
1/15 x # of students x # of contact hours for the class x the overload rate
4. Hybrid Course Instruction
a. The enrollment for hybrid classes will be no greater than twenty-three (23) students per
section.
b. If the administration requests a faculty member to overload a hybrid class and the faculty
member accepts, the formula to determine the rate of pay for the additional student(s) shall

be as follows:
1/15 x # of students x # of contact hours for the class x the overload rate "

| | |
|---|---|
| Title: | An Examination of the Relationship between Online Class Size and Instructor Performance |
| Author(s): | Sorensen, Chris |
| Source: | Journal of Educators Online, v12 n1 p140-159 Jan 2015. 20 pp. |
| Peer Reviewed: | Yes |
| Descriptors: | Online Courses, Class Size, Teacher Competencies, Correlation, Feedback (Response), Teacher Student I Thinking, Teacher Expectations of Students, Expertise, Part Time Faculty, Observation, College Faculty, S Education, Postsecondary Education |
| Abstract: | With no physical walls, the online classroom has the potential to house a large number of students. A co courses with high enrollments. The purpose of this research was to examine online class size and its rela performance. Results were mixed indicating that class size had a positive relationship with some the vari negative relationship with others. Online class size was seen as having the most concerning relationship feedback to students and for his/her expertise to be used consistently and effectively. |
| Abstractor: | As Provided |
| Number of References: | 28 |
| Number of Pages: | 20 |
| Publication Type: | Journal Articles; Reports - Research |
| Availability: | Full Text from ERIC Available online: http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno= Journal of Educators Online. 500 University Drive, Dothan, AL 36303. Web site: http://www.thejeo.com |
| Journal Code: | MAR2015 |
| Entry Date: | 2015 |
| Accession Number: | EJ1051032 |
| Persistent link to this record (Permalink): | http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=E |
| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e of the Relationship between Online Class Size and Instructor Performance</a> |
| Database: | ERIC |

**Record: 2**

| | |
|---|---|
| Title: | Class Size and Interaction in Online Courses |
| Author(s): | Orellana, Anymir |
| Source: | Quarterly Review of Distance Education, v7 n3 p229-248 2006. 20 pp. |
| Peer Reviewed: | Yes |
| ISSN: | 1528-3518 |
| Descriptors: | Class Size, Online Courses, Interaction, Teacher Attitudes, College Faculty, Undergraduate Study, Gradu Education, Postsecondary Education |
| Abstract: | This article presents findings of a study conducted to determine instructors' perceptions of optimal class Implications for research and practice are also presented. A Web-based survey method was employed. C years by a single instructor in undergraduate or graduate programs from U.S. higher education institutio most recently taught online course using a Web version of Roblyer and Wiencke's (2004) Rubric for Asse optimal class sizes according to such qualities. Responses from 131 instructors were analyzed. On avera interactive, (b) the actual class size of the online courses was 22.8, (c) a class size of 18.9 was perceive interaction, and (d) a class size of 15.9 was perceived as optimal to achieve the highest level of interacti sizes and their actual level of interaction. (Contains 5 tables.) |
| Abstractor: | As Provided |
| Number of References: | 54 |
| Number of Pages: | 20 |
| Publication Type: | Journal Articles; Reports - Research |
| Availability: | IAP - Information Age Publishing, Inc. P.O. Box 79049, Charlotte, NC 28271-7047. Tel: 704-752-9125; F http://www.infoagepub.com/products/journals/qrde/order.html |
| URL: | http://www.infoagepub.com/index.php?id=89&i=9 |
| Journal Code: | FEB2014 |
| Entry Date: | 2010 |
| Accession Number: | EJ875034 |
| Persistent link to this record (Permalink): | http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=E |
| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e Interaction in Online Courses</a> |
| Database: | ERIC |

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|---|---|
| Title: | Online, Bigger Classes May Be Better Classes |
| Author(s): | Parry, Marc |
| Source: | Education Digest: Essential Readings Condensed for Quick Review, v76 n4 p19-22 Dec 2010. 4 pp. |
| Peer Reviewed: | N/A |
| ISSN: | 0013-127X |
| Descriptors: | Foreign Countries, Online Courses, Electronic Learning, Class Size, Privacy, Access to Education, Distance Educational Environment, Influence of Technology, Context Effect, Higher Education |
| Identifiers: | Canada |
| Abstract: | In his work as a professor, Stephen Downes used to feel that he was helping those who least needed it. leg up in life and could afford the tuition. When a colleague suggested they co-teach an online class in le welcomed the chance to expand that privileged club. In an experiment that could point to a more open f 1,200 noncredit participants last year. The Downes-Siemens course has become a landmark in the small the Massachusetts Institute of Technology have offered free educational materials online for years, but t experience, too. However, not everything about open learning is revolutionary. The question is whether educators who haven't taken the plunge yet are interested, but also cautious. Like many institutions, the materials, such as lecture slides and syllabi. But Gary W. Matkin, dean of continuing education, says he c a separate space. Partly, he says, it's about student privacy, but also about setting a learning context for is structured. Lori Wallace, dean of extended education, notes that open teaching is up against academe ownership. |
| Abstractor: | ERIC |
| Number of Pages: | 4 |
| Publication Type: | Journal Articles; Reports - Descriptive |
| Availability: | Prakken Publications. 832 Phoenix Drive, P.O. Box 8623, Ann Arbor, MI 48108. Tel: 734-975-2800; Fax: |
| URL: | http://www.eddigest.com/sub.php?page=contents |
| Journal Code: | FEB2014 |
| Entry Date: | 2011 |
| Accession Number: | EJ913282 |
| Persistent link to this record (Permalink): | http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=E |
| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e Classes May Be Better Classes</a> |

http://www.tc3.edu/docs/hr/uc_faculty.pdf

Tompkins Cortland Community College in New York, per their contract caps online classes at same level as f2f
" A Distance Learning section is credited to a faculty member's total load the same as any nondistance
learning section of the same course." p 47
NOTE- They do provide separate compensation for development

http://www.asccc.org/sites/default/files/ClassCapsS12_0.pdf
The Academic Senate for CC resolved in 2012 that the enrollment sizes for DL should be local decision but made no suggestions for ideal nos. (cf. p. 4/p.8)

| | |
|---|---|
| Title: | Using Interactive Content and Online Activities to Accommodate Diversity in a Large First Year Class |
| Author(s): | Snowball, J. D. |
| Source: | Higher Education: The International Journal of Higher Education and Educational Planning, v67 n6 p823- |
| Peer Reviewed: | Yes |
| ISSN: | 0018-1560 |
| Descriptors: | Class Size, Teaching Methods, Large Group Instruction, Case Studies, Higher Education, Student Attitude Academic Achievement, Socioeconomic Background, Economics, Economics Education, Computer Assiste |
| Abstract: | As in many universities, class sizes have increased more quickly than teaching and learning resources. A terms of socio-economic background, learning styles, English language ability and preparedness. This pa methods (such as lectures and tutorials) can be combined with online teaching and learning activities in and to accommodate student diversity. Using a large first year Economics class as a case study, data we A statistical model was used on a sample of 50 students to determine which online activities were most I students agreed that replacing one lecture a week with online activities and resources improved their lea more lecturing and fewer online resources. Statistical finding showed that more active online resources, beneficial in improving student performance, but that more passive lecture capture was also useful in m |
| Abstractor: | As Provided |
| Number of References: | 29 |
| Number of Pages: | 16 |
| Publication Type: | Journal Articles; Reports - Research |
| Availability: | Springer. 233 Spring Street, New York, NY 10013. Tel: 800-777-4643; Tel: 212-460-1500; Fax: 212-348- http://www.springerlink.com |
| URL: | http://dx.doi.org/10.1007/s10734-013-9708-7 |
| Journal Code: | JAN2015 |
| Entry Date: | 2014 |
| Accession Number: | EJ1036662 |
| Persistent | http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=E |

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| link to this record (Permalink): | |
| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e Interactive Content and Online Activities to Accommodate Diversity in a Large First Year Class</a> |

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| Author(s): | Sorensen, Chris |
| Source: | Journal of Educators Online, v12 n1 p140-159 Jan 2015. 20 pp. |
| Peer Reviewed: | Yes |
| Descriptors: | Online Courses, Class Size, Teacher Competencies, Correlation, Feedback (Response), Teacher Student I Thinking, Teacher Expectations of Students, Expertise, Part Time Faculty, Observation, College Faculty, S Education, Postsecondary Education |
| Abstract: | With no physical walls, the online classroom has the potential to house a large number of students. A co courses with high enrollments. The purpose of this research was to examine online class size and its rela performance. Results were mixed indicating that class size had a positive relationship with some the vari negative relationship with others. Online class size was seen as having the most concerning relationship feedback to students and for his/her expertise to be used consistently and effectively. |
| Abstractor: | As Provided |
| Number of References: | 28 |
| Number of Pages: | 20 |
| Publication Type: | Journal Articles; Reports - Research |
| Availability: | Full Text from ERIC Available online: http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno= Journal of Educators Online. 500 University Drive, Dothan, AL 36303. Web site: http://www.thejeo.com |
| Journal Code: | MAR2015 |
| Entry Date: | 2015 |
| Accession Number: | EJ1051032 |
| Persistent link to this record (Permalink): | http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=E |

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|---|---|
| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e of the Relationship between Online Class Size and Instructor Performance</a> |
| Title: | Student Evaluation of Instruction: In the New Paradigm of Distance Education |
| Author(s): | Liu, Ou Lydia |
| Source: | Research in Higher Education, v53 n4 p471-486 Jun 2012. 16 pp. |
| Peer Reviewed: | Yes |
| ISSN: | 0361-0365 |
| Descriptors: | Class Size, Academic Rank (Professional), Student Evaluation, Distance Education, Models, Academic Ach Learning, Sample Size, College Faculty, Teachers, Higher Education |
| Abstract: | Distance education has experienced soaring development over the last decade. With millions of students critically important to understand student learning and experiences with online education. Based on a lar colleges and universities, this study investigates the factors that impact student evaluation of instruction findings reveal that in a distance education setting, gender and class size are no longer significant predic taking the course, student class status and instructor's academic rank have a significant impact on stude offer important implications for institutional administrators on utilizing the evaluation results and on deve instructors. |
| Abstractor: | As Provided |
| Number of References: | 42 |
| Number of Pages: | 16 |
| Publication Type: | Journal Articles; Reports - Research |
| Availability: | Springer. 233 Spring Street, New York, NY 10013. Tel: 800-777-4643; Tel: 212-460-1500; Fax: 212-348 http://www.springerlink.com |
| URL: | http://dx.doi.org/10.1007/s11162-011-9236-1 |
| Journal Code: | FEB2014 |
| Entry Date: | 2012 |
| Accession Number: | EJ963416 |
| Persistent link to this record (Permalink): | http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=E |
| itle: | Class Size and Interaction in Online Courses |
| Author(s): | Orellana, Anymir |
| Source: | Quarterly Review of Distance Education, v7 n3 p229-248 2006. 20 pp. |

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|---|---|
| Peer Reviewed: | Yes |
| ISSN: | 1528-3518 |
| Descriptors: | Class Size, Online Courses, Interaction, Teacher Attitudes, College Faculty, Undergraduate Study, Gradu Education, Postsecondary Education |
| Abstract: | This article presents findings of a study conducted to determine instructors' perceptions of optimal class Implications for research and practice are also presented. A Web-based survey method was employed. C years by a single instructor in undergraduate or graduate programs from U.S. higher education institutio most recently taught online course using a Web version of Roblyer and Wiencke's (2004) Rubric for Asse optimal class sizes according to such qualities. Responses from 131 instructors were analyzed. On avera interactive, (b) the actual class size of the online courses was 22.8, (c) a class size of 18.9 was perceive interaction, and (d) a class size of 15.9 was perceived as optimal to achieve the highest level of interacti sizes and their actual level of interaction. (Contains 5 tables.) |
| Abstractor: | As Provided |
| Number of References: | 54 |
| Number of Pages: | 20 |
| Publication Type: | Journal Articles; Reports - Research |
| Availability: | IAP - Information Age Publishing, Inc. P.O. Box 79049, Charlotte, NC 28271-7047. Tel: 704-752-9125; F http://www.infoagepub.com/products/journals/qrde/order.html |
| URL: | http://www.infoagepub.com/index.php?id=89&i=9 |
| Journal Code: | FEB2014 |
| Entry Date: | 2010 |
| Accession Number: | EJ875034 |
| Persistent link to this record (Permalink): | http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=E |
| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e Interaction in Online Courses</a> |
| Title: | Online, Bigger Classes May Be Better Classes |
| Author(s): | Parry, Marc |
| Source: | Education Digest: Essential Readings Condensed for Quick Review, v76 n4 p19-22 Dec 2010. 4 pp. |
| Peer Reviewed: | N/A |
| ISSN: | 0013-127X |

| | |
|---|---|
| Descriptors: | Foreign Countries, Online Courses, Electronic Learning, Class Size, Privacy, Access to Education, Distanc Educational Environment, Influence of Technology, Context Effect, Higher Education |
| Identifiers: | Canada |
| Abstract: | In his work as a professor, Stephen Downes used to feel that he was helping those who least needed it. leg up in life and could afford the tuition. When a colleague suggested they co-teach an online class in le welcomed the chance to expand that privileged club. In an experiment that could point to a more open f 1,200 noncredit participants last year. The Downes-Siemens course has become a landmark in the small the Massachusetts Institute of Technology have offered free educational materials online for years, but t experience, too. However, not everything about open learning is revolutionary. The question is whether educators who haven't taken the plunge yet are interested, but also cautious. Like many institutions, the materials, such as lecture slides and syllabi. But Gary W. Matkin, dean of continuing education, says he a separate space. Partly, he says, it's about student privacy, but also about setting a learning context for is structured. Lori Wallace, dean of extended education, notes that open teaching is up against academe ownership. |
| Abstractor: | ERIC |
| Number of Pages: | 4 |
| Publication Type: | Journal Articles; Reports - Descriptive |
| Availability: | Prakken Publications. 832 Phoenix Drive, P.O. Box 8623, Ann Arbor, MI 48108. Tel: 734-975-2800; Fax: |
| URL: | http://www.eddigest.com/sub.php?page=contents |
| Journal Code: | FEB2014 |
| Entry Date: | 2011 |
| Accession Number: | EJ913282 |
| Persistent link to this record (Permalink): | http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=E |
| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e Classes May Be Better Classes</a> |

http://www.usnews.com/education/online-education/articles/2014/09/26/experts-say-class-size-can-matter-for-online-students

http://wps.prenhall.com/wps/media/objects/4512/4621309/Survey_Online_Class_Size.pdf

I love these two articles because they place the ideal class size at

18-22 which is what I have just naturally have always said, from my experience, is an ideal class size!

Interesting, isn't it?

https://onlinelearninginsights.wordpress.com/2015/01/14/does-class-size-matter-in-online-courses-three-perspectives/

http://hej.sagepub.com/content/early/2015/04/16/0017896915581060.abstract

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|---|---|
| Title: | Big Classes Encourage Experiments in Teaching. (cover story) |
| Authors: | Glenn, David |
| Source: | Chronicle of Higher Education. 3/12/2010, Vol. 56 Issue 26, pA1-A11. 4p. 2 Color Photographs. |
| Document Type: | Article |
| Subject Terms: | *CLASS size<br>*CLASSROOM management<br>*COMPOSITION (Language arts) -- Study & teaching (Higher)<br>*WEB-based instruction<br>*EDUCATIONAL innovations<br>*HIGHER education |
| Geographic Terms: | CALIFORNIA |
| Company/Entity: | CALIFORNIA State University, Chico |
| Abstract: | The article discusses the large numbers of students in classes at California State University in Chico, classes are uneasy because faculty members are less likely to interact with students personally, use have offered six experimental course redesigns of English 130, a composition course taken by almos class of 90 students for two hours a week and then two hours meeting with students in small group students in a class are discussed. |
| Full Text Word Count: | 2203 |
| ISSN: | 0009-5982 |
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| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&<br>Encourage Experiments in Teaching.</a> |
| Database: | Academic Search Premier |

Big Classes Encourage Experiments in Teaching
Cal State U. at Chico reworks courses, while instructors worry
Dateline: CHICO, CALIF.
Back in 2005, officials at California State University at Chico asked students how to improve English 130, a

composition course that almost every undergraduate there takes. One consistent response: Class sections should be smaller.

But in the years since then, the enrollment cap on English 130 sections has actually crept upward, from 22 to 30. That's no great surprise. Across the country, budget-straitened colleges have been quietly increasing the sizes of all sorts of courses. At some institutions, introductory-level lectures are now capped at whatever the fire code will allow, and upper-level seminars are drifting from 12 students to 20 and beyond.

Many instructors are deeply uneasy about those changes. With rooms bursting at the seams, they say, faculty members are less likely to interact personally with students--and are less likely to use essay tests or to assign serious amounts of writing.

Still, some administrators and professors say they are trying to make the best of a bad situation by redesigning courses for a new era of high student-faculty ratios. Chico State, for example, has rolled out six experimental course redesigns this year. Some feel bulging class sizes provide an overdue opportunity for faculty members to think about how to use new learning technologies, such as online instruction.

"I want to use all the tools that are out there to help people design a curriculum that has students fully engaged," says Sandra M. Flake, Chico State's provost. "In the long run, I don't even really care if it saves money, as long as it improves student learning."

But others worry that the redesigns are merely papering over the problem of overcrowded classrooms.

"I'm afraid that we're going to dilute the product and cheapen the value of our degrees," says Susan M. Green, an associate professor of Chicano studies and history and president of the faculty union at Chico. "I've heard many people here say that last semester was their worst semester of teaching." Some of her students are first-generation Latinos whose families work on the farms west of here. Campus officials are kidding themselves, she says, if they think those students have easy access to the Internet for online classes.

## 'Let's Blow It Up'

Some of Chico State's newly redesigned courses, rather than turning to the Internet, use classroom time in a new way. English 130, the composition course, is one of them.

This semester three experimental sections of that course have ballooned beyond 30 students. Far beyond--all the way to 90.

It was a deliberate change. "When the English 130 sections moved above 22 students, it really didn't seem to be working well," says Kim D. Jaxon, a lecturer in composition. "So I thought, Fine. Let's blow it up. Let's try 90."

Ms. Jaxon and a colleague submitted a proposal to Chico State's course-redesign competition last year. They suggested the experimental sections, in which students meet for two hours a week in a roomful of 90 students and spend another two hours meeting in small groups of 10. When they meet in those small groups, they are supervised not by a faculty member but by teams of undergraduate teaching assistants. (Chico State, like most campuses in the California State University system, has few graduate students, so it can't deploy the armies of graduate TA's that are found at large research universities.)

Ms. Jaxon herself is not leading any of the experimental sections this semester; instead, she supervises the undergraduate teaching assistants, most of whom are students in an upper-level teacher-training course that she directs.

A crucial aspect of the experiment, Ms. Jaxon says, is that when the students meet in their large sections of 90, they are not passively absorbing lectures. Even in the large classroom meetings they are generally broken up into small groups, working on short assignments and reviewing drafts of one another's essays. "One of the best ways to learn deeply," she says, "is to work with your peers and to try to explain to others what you've done."

Ms. Green is not so sure. Her faculty union has filed a grievance over the use of undergraduate assistants in the classroom. "I've talked to students who have said that it just feels like babysitting," she says.

In one of the small English 130 sections on a recent afternoon, the undergraduate teaching assistants seemed thoughtful and dedicated; if they're babysitters, they're skilled ones. According to Ms. Jaxon, of the 178 students who took the course in this experimental mode last fall, all but five passed the course. Standard sections of the course have an average failure rate of roughly 15 percent, according to Aiping Zhang, chair of the English department.

But Ms. Jaxon herself doubts that her experimental model could ever be scaled up to serve every section of English 130. (This semester there are 28 "normal" sections with 30 students each, plus the three experimental sections with 90 each.)

For one thing, there aren't nearly enough large classrooms at Chico State--especially not flat-floored classrooms where students can easily be broken into small groups. And Ms. Jaxon also says that it would be difficult to recruit and supervise enough skilled undergraduate teaching assistants to make the system work on a large scale.

## Taking It Online

Most of Chico State's other recent course redesigns involve new elements of online learning. An experimental section of Psychology 101, for example, has the students meet face to face just once a week, while doing computer exercises throughout the week. The size of the class has moved from 49 to 70, even though the classroom still holds just 49 students. That works because half the class meets on Tuesdays, and the other half on Thursdays.

"My faculty wanted to look carefully at what we do in the classroom and what we can do online," says Brian J. Oppy, the department's chair.

Michael P. Ennis, an assistant professor of psychology who is leading the experimental section, says the new online instruction seems to be working well so far. "I wanted to increase the size of the class but still have weekly contact with every student," he says. Each Friday, Mr. Ennis asks his students to e-mail him with notes and questions about concepts that are confusing them.

There are, of course, precedents for this kind of project. For more than a decade, the National Center for Academic Transformation, a New York-based organization, has guided dozens of well-regarded course redesigns, mostly in introductory courses in psychology, mathematics, and biology. Those projects are often explicitly aimed at reducing instructional costs by increasing the student-faculty ratio. (Though Chico State is not formally working with the center, its faculty members have been encouraged to choose from among the center's six major design models.)

But some faculty members say that Chico State is applying those models to courses for which they aren't necessarily well suited. In one redesign, a course titled "Access and Equity in Education," which is a requirement for several education programs, has had some of its sessions moved online, while the size of each section grew from 35 to 45.

At least one instructor who teaches the course says that design does not work.

"I want to make sure that the technology follows the content, not vice versa," says Ann K. Schulte, an associate professor of education. Ms. Schulte filed a formal objection this semester, arguing that the complex policy issues that are covered in the course really require face-to- face discussion. It was a mistake, Ms. Schulte says, to move the section caps above 35.

Ms. Flake, the provost, says that such complaints have been rare. She says she has taken great pains not to force choices on her faculty members. "One of the things we're trying to do is to reduce the impact of a larger course on a faculty member," she says. "If you do a redesign that uses time differently and the faculty member is working with other support, you can in fact reduce costs but not increase workload. And that's important to us, because our faculty already teach four courses typically."

## The Wisdom of Crowds?

Chico State is far from the only campus that is wrestling with these tensions. In January the University of Colorado at Boulder announced that it would lift the 25-student cap on many of its upper-level courses. Last year the University of Washington moved many of its caps from 35 to 40. And the provost of Western Carolina University announced last year that the only cap on its courses would be classroom capacity, unless faculty members could successfully plead for special low enrollments.

It would be nice if the scholarly literature on class size offered some guidance about best practices, but on the college level such work is relatively thin. Several studies have found that student evaluations of courses are lower when classes are larger--but that doesn't necessarily reveal much about the quality of student learning.

Edward C. Kokkelenberg, a professor of economics at Binghamton University, has analyzed a large data set from a public university (presumably his own campus, but officially it is kept pseudonymous). He found that students' grades and course satisfaction are generally lower in larger classes.

Last fall a team of scholars at the London School of Economics and Political Science led by Oriana Bandiera released a similar study about a large English university (again, presumably their own). They found that students' test scores benefited from classes smaller than 30 and suffered when students were assigned to courses larger than 100. But they found no significant effects within a large range of intermediate class sizes, between roughly 35 and 100. Moving a class to, say, 80 students from 50 or vice versa did not seem to matter much.

Whatever the general pattern, many faculty members in the California State system say that something feels badly wrong to them. As hundreds of adjunct instructors have been let go, tenure-track professors have felt new pressures to fill their classrooms to the brim. In the fall 2009 semester, according to data compiled by the faculty union, the California State system as a whole offered 5,300 fewer course sections than it did in the fall of 2007, even though statewide enrollment grew by 2,200 students during that period. (A spokesman for the university system says enrollment growth was actually only around 900, but he does not dispute the course-section figure.)
"I've seen the caps on my courses go from 35 to 59," Ms. Green says. "That means that I don't assign as many essays. And for students with any kind of learning disability, a room with 59 is a much more difficult environment. It's much harder for them to cope with distractions."
Kevin Wehr, an associate professor of sociology at California State University at Sacramento (and the leader of that campus's faculty union), agrees. "When you suddenly move into a classroom with more than 100 students," he says, "it becomes 80-percent theater and 20- percent actual teaching."
The relatively well-prepared students at the University of California at Berkeley might be able to cope with lecture courses of 300 students or more, Mr. Wehr and Ms. Green say. But students in the California State system often arrive with significant deficits, and they suffer in classes that are so large that they become anonymous.
Some of the class-size pressures on the California State campuses might soon ease--although for an unhappy reason. The state budget is now so bad that the Cal State system is significantly slashing its student enrollment. If enough instructors are retained, at least a few courses in the system might be able to return to their lower caps.
In fact, last month the Chico State faculty senate approved a new general-education program that calls for every section of English 130 to be pared down to 20 students. Three other "writing intensive" courses will also be capped at that level, if all goes as planned.
Mr. Zhang, the English-department chair, says he is heartened by the new commitment, though it is not clear how soon (if ever) it will be realized.
"It's really very difficult to teach that course with more than 25 students," he says. "Every semester we have gone to the dean to ask for support to keep those caps low."
At the same time, Mr. Zhang says that in a recession, larger class sizes might be among the lesser evils. "Last semester we had a backlog of 2,000 students wanting to take English 130," he says. "Students have been complaining, and rightly so. That means that even though on one level we wanted to lower the cap, we just couldn't." Better to crowd students into classrooms, Mr. Zhang says, than to leave them out in the cold entirely.
PHOTO (COLOR): In a newly redesigned composition course at California State U. at Chico, some sections were expanded to include 90 students, who also meet periodically in smaller groups.
PHOTO (COLOR): Undergraduate teaching assistants like Nick Allen (center) help lead small writing workshops that accompany large sections of a composition course at California State U. at Chico.
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By David Glenn



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|---|---|
| Title: | Using Interactive Content and Online Activities to Accommodate Diversity in a Large First Year Class |
| Author(s): | Snowball, J. D. |
| Source: | Higher Education: The International Journal of Higher Education and Educational Planning, v67 n6 p823- |
| Peer Reviewed: | Yes |
| ISSN: | 0018-1560 |
| Descriptors: | Class Size, Teaching Methods, Large Group Instruction, Case Studies, Higher Education, Student Attitude Academic Achievement, Socioeconomic Background, Economics, Economics Education, Computer Assiste |
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| Abstract: | As in many universities, class sizes have increased more quickly than teaching and learning resources. A terms of socio-economic background, learning styles, English language ability and preparedness. This pa methods (such as lectures and tutorials) can be combined with online teaching and learning activities in and to accommodate student diversity. Using a large first year Economics class as a case study, data we A statistical model was used on a sample of 50 students to determine which online activities were most l students agreed that replacing one lecture a week with online activities and resources improved their lea more lecturing and fewer online resources. Statistical finding showed that more active online resources, beneficial in improving student performance, but that more passive lecture capture was also useful in m |
| Abstractor: | As Provided |
| Number of References: | 29 |
| Number of Pages: | 16 |
| Publication Type: | Journal Articles; Reports - Research |
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| URL: | http://dx.doi.org/10.1007/s10734-013-9708-7 |
| Journal Code: | JAN2015 |
| Entry Date: | 2014 |
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| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e Interactive Content and Online Activities to Accommodate Diversity in a Large First Year Class</a> |
| Database: | ERIC |
| Title: | Class Size and Interaction in Online Courses |
| Author(s): | Orellana, Anymir |
| Source: | Quarterly Review of Distance Education, v7 n3 p229-248 2006. 20 pp. |
| Peer Reviewed: | Yes |
| ISSN: | 1528-3518 |
| Descriptors: | Class Size, Online Courses, Interaction, Teacher Attitudes, College Faculty, Undergraduate Study, Gradua Education, Postsecondary Education |
| Abstract: | This article presents findings of a study conducted to determine instructors' perceptions of optimal class Implications for research and practice are also presented. A Web-based survey method was employed. C |

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| | years by a single instructor in undergraduate or graduate programs from U.S. higher education institutio most recently taught online course using a Web version of Roblyer and Wiencke's (2004) Rubric for Asse optimal class sizes according to such qualities. Responses from 131 instructors were analyzed. On avera interactive, (b) the actual class size of the online courses was 22.8, (c) a class size of 18.9 was perceive interaction, and (d) a class size of 15.9 was perceived as optimal to achieve the highest level of interacti sizes and their actual level of interaction. (Contains 5 tables.) |
| Abstractor: | As Provided |
| Number of References: | 54 |
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| URL: | http://www.infoagepub.com/index.php?id=89&i=9 |
| Journal Code: | FEB2014 |
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| Accession Number: | EJ875034 |
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| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e Interaction in Online Courses</a> |
| Database: | ERIC |

**Record: 2**

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|---|---|
| Title: | Student Evaluation of Instruction: In the New Paradigm of Distance Education. |
| Authors: | Liu, Ou[1] lliu@ets.org |
| Source: | Research in Higher Education. Jun2012, Vol. 53 Issue 4, p471-486. 16p. 5 Charts, 1 Graph. |
| Document Type: | Article |
| Subject Terms: | *STUDENT evaluation of college teachers<br>*STUDENT evaluation of curriculum<br>*DISTANCE education teachers<br>*WEB-based instruction<br>*DISTANCE education<br>*CLASS size -- Research<br>*CLASS size -- Universities & colleges |

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|---|---|
| Geographic Terms: | UNITED States |
| Author-Supplied Keywords: | Distance education<br>eSIR<br>Hierarchical linear modeling<br>Learning outcomes<br>Student evaluation of instruction |
| Abstract: | Distance education has experienced soaring development over the last decade. With millions of students critically important to understand student learning and experiences with online education. Based on a la colleges and universities, this study investigates the factors that impact student evaluation of instruction findings reveal that in a distance education setting, gender and class size are no longer significant predic taking the course, student class status and instructor's academic rank have a significant impact on stude offer important implications for institutional administrators on utilizing the evaluation results and on deve instructors. [ABSTRACT FROM AUTHOR]<br> |
| Author Affiliations: | [1]Educational Testing Service, MS16-R, 660 Rosedale Rd. Princeton 08541 USA |
| ISSN: | 0361-0365 |
| DOI: | 10.1007/s11162-011-9236-1 |
| Accession Number: | 74492065 |
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| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a Evaluation of Instruction: In the New Paradigm of Distance Education.</a> |
| Database: | Academic Search Premier |

**Record: 3**

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|---|---|
| Title: | THE END OF SCHOOL AS WE KNOW IT. |
| Authors: | Campbell, MacGregor |
| Source: | New Scientist. 9/8/2012, Vol. 215 Issue 2881, p6-8. 3p. |
| Document Type: | Article |
| Subject Terms: | *INTERNET in education<br>*VIRTUAL schools<br>*EDUCATION & state<br>*CLASS size<br>*SCHOOL districts -- Finance<br>*LEARNING Management System (Computer software)<br>*EDUCATIONAL change |
| Geographic | UNITED States |

Terms:

NAICS/Industry Codes: 912910 Other provincial and territorial public administration
913910 Other local, municipal and regional public administration
923110 Administration of Education Programs
611110 Elementary and Secondary Schools

Abstract: The article discusses the growth of online education in the U.S. The author presents an example of p children in the state's full-time online school, called Oregon Connections Academy, because of increas of online education, schools' increasing use of learning management systems, and the effectiveness

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# THE END OF SCHOOL AS WE KNOW IT

SPECIAL REPORT / ONLINE EDUCATION

Online education is exploding in the US. Could this kind of learning mean the era of classroom teaching is over? MacGregor Campbell investigates

EIGHT-YEAR-OLD Julia Ratten and her brother Jack, who is 7, won't be going back to their local school this month. After the school district in Beaverton, Oregon, announced its latest round of budget cuts, teacher lay-offs and increases in class sizes, Jack and Julia's parents decided to enrol them in the state's full-time online school, Oregon Connections Academy.

"I thought it was weird to send your kids to online school," says their mother, Kristin. But facing class sizes of more than 30, she says she and her husband Jason saw little to lose in trying something different.

As schools around the US come back from their summer break, the Rattens are one of a small but rapidly growing number of families who are turning to the internet as an alternative to chronically under-resourced brick and mortar institutions.

Proponents say online primary and secondary education, whether full-time or as part of a "blended" programme of online and face-to-face education, could usher in a new era of personalising education that will give each child the best chance of success.

Critics argue that there is little evidence online learning is effective. But as state-run schools, for-profit schools and even free alternatives such as video lessons set up shop online, more and more US students are ditching the traditional classroom.

Florida Virtual School, the first internet-based, state-run high school, opened its virtual doors in 1997. But in the last few years, as the US economy has faltered, some 35 states have cut budgets at all stages of education, from kindergarten to 17 and 18-year-olds in 12th grade, collectively known as K-12. Driven by the promise of reduced costs per student, states have increasingly turned to large-scale online learning programmes. Today, 30 states offer full-time online schools. Some, like Tennessee, require all students to take at least some online classes.

According to the Evergreen Education Group, an educational consultancy based in Durango, Colorado, around 250,000 students attended online-only schools in the 2010-2011 school year. That's only about 0.5 per cent of the approximately 55 million K-12 students in the US, but it's a jump of 25 per cent over the previous year and the numbers are likely to keep rising.

"We anticipate continued growth until around half of courses are taken online in high school," says Kerry Rice, an education researcher at Boise State University in Idaho. A 2009 analysis by Clayton Christenson of Harvard Business School in Boston, suggested this could happen as early as 2019.

The "flipped" classroom model in particular has grown tremendously in the past year, says Jon Bergmann, an educational consultant based in Lake Forest, Illinois. Teachers record video lessons for students to watch at their own pace, usually outside class. The idea, says Bergmann, is to free up class time for collaborative projects and individual attention. "It personalises the learning for each kid," he says.

Greg Green, principal of Clintondale High School in Clinton, Michigan, put the practice to the test during the 2010-2011 school year with his entire school of around 600 students, many of whom were at risk of failing or dropping out of the school system. He says the move quadrupled the amount of time his teachers were able to spend with each student, leading to a reduction in classroom failures, fewer discipline problems, and increases in college entrance and standardised test scores. "We were removed from the state's] persistently lowest achieving list, which people said would never happen," he says.

## Technology boost

It is not just lessons that are getting a boost from technology. Schools are increasingly turning to learning management systems, such as Blackboard or Moodle, to track students and facilitate online learning. These software packages typically provide an interface for students to keep track of assignments, watch videos or read course content, and participate in discussion groups and forums. They can also include video-conferencing and real-time chat with teachers and other students.

So does online education work? A 2009 meta-analysis of over 1000 studies of online learning, conducted by the US Department of Education, found that students participating in either fully or partially online courses scored higher on average than 59 per cent of their traditionally educated peers on performance tests. Students in blended education got better marks on average than online-only students. The majority of these studies looked at higher education, however, and while the few that focused on K-12 showed small gains over traditional classrooms, there were not enough examples to draw firm conclusions. "The research literature is extremely thin," says David Figlio, an education and social policy researcher at Northwestern University in Chicago.

There are concerns that some firms offering online learning programmes may not be providing education of a high-enough standard. In July, the National Education Policy Center, a non-profit research organisation affiliated with the University of Colorado in Boulder, said that only 28 per cent of the virtual schools operated by the company K12 - the largest private provider of online educational services in the US - met federal Adequate Yearly Progress measures, as determined by standardised test scores in 2010-2011. The figure is 52 per cent for physical schools across the country.

The report cited higher drop-out rates from schools run by K12 and called for school districts to slow their adoption of the company's programming until it demonstrates better academic results.

The company, which is based in Herndon, Virginia, responds that many online-only students were performing below grade level when they started at K12 schools - which for the most part are publicly funded. Therefore traditional metrics, such as performance in mathematics at age 16, do not capture the growth in scores that its students made over the course of the year.

This doesn't necessarily mean that virtual and blended schools aren't working, says Rice. Part of the problem may lie in the difficulty of comparing online learning and face-to-face instruction when there is such a variety of school populations and teaching approaches. "There are really good face-to-face schools and there are really bad face-to-face schools. And there are really good online schools and there are really ineffective online schools," she says. "What we really want to know is 'what is effective in each type of environment?' "

Cathy Cavanaugh, an education technology researcher at the University of Florida in Gainesville, says that one approach that seems to have promise is awarding credits based on mastery of specific skills, such as algebra, rather than how much "seat time" a student has put in. The majority of US schools measure students' progress through the education system using Carnegie units, a measure of time spent either in a classroom or studying at home. This can be discouraging for students who master concepts more quickly or slowly than the pace set by the school.

Mastery-based instruction allows students to progress at their own pace, rather than in lockstep with the rest of their cohort, says Cavanaugh. Although this has always been possible with the books-and-paper model of traditional schools, technology makes it easier for teachers to keep track of how each student is doing and to

provide appropriately challenging curricula. Some states are adopting regulations to allow for this shift. New Hampshire, for example, recently redesigned its high-school programme to do away with seat time in favour of mastery-based credit.

Cavanaugh says these approaches might make education function more like healthcare, allowing people to be treated as individuals. "Brains are at least as different as bodies, but as an education system we have struggled to find ways to personalise learning," she says.

As more students head online, Cavanaugh sees "school" transforming from a building to a service, some of which takes place in the presence of teachers and other students, and some of which happens online. As technology allows more students to benefit from personalised instruction, she says, classroom-only approaches will become less common. "Every type of learning environment will be in the minority," she says. "There will be so many varying approaches that no single approach will prevail."

But academic performance is only one reason why kids go to school, and critics of online learning - and virtual schools in particular - say that students miss out on building social skills because they don't interact with their peers in person.

It's a concern that the Rattens share, although they are encouraged by the number of clubs and extracurricular activities offered as physical complements to the online school. They argue that traditional classrooms are not a good place to practise modern social skills, which increasingly involve email, chat and video conferencing. "There are not a lot of classrooms in the real world," says Jason.

Cyber-classes

The number of US students learning online is rising fast

About 250,000 children in the US attend schools that are entirely online

A child's mastery of certain subjects can be more easily assessed when they learn online

WHAT WORKS BEST FOR STUDENTS

"Big data" is a well-known term in the realms of science and business, but educators are just beginning to explore how to use the flood of information generated by students taking online classes.

Kerry Rice of Boise State University in Idaho says that traditional metrics of attendance, disciplinary actions and grades are coarse compared with the information that online learning management systems can provide from clickstreams, time spent watching video, and records of students' progress through various topics. By using machine learning to understand these trends, computers could one day customise curricula automatically.

For example, the not-for-profit Khan Academy, which hosts thousands of instructional videos and automated practice exercises, provides teachers with detailed analysis of what videos their students have watched and which concepts they got stuck on.

And Silicon Valley-based start-up Knowmia, launched in August, is building a recommendation engine for the ever-expanding collection of free online educational videos. The site aggregates teacher and professionally produced material from sites like YouTube and creates what works best for students custom collections based on feedback that students give on how they learn best. Some students may like to be able to see the teacher in a video, for example, while others prefer flashy graphics.

At the moment, these collections are managed by human curators, but co-founder Scott Kabat says that as the company collects more viewing and rating data, it will add automated recommendations that will match students with teachers who use their preferred learning style. "When you find the right teacher and teaching style, there's a magic that happens," Kabat says.

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By MacGregor Campbell



**Record: 4**

Title: Web-Based Instruction and Community College Faculty Workload.

Authors: Mupinga, Davison M.[1]
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Maughan, George R.[2]
Source: College Teaching. Winter2008, Vol. 56 Issue 1, p17-21. 5p.
Document Type: Article
Subject Terms: *WEB-based instruction
*COLLEGE teachers -- Workload
*COMPUTER assisted instruction
*COMMUNITY colleges
*COMMUNITY & college
*SCHOOL administration
*SCHOOL size
Author-Supplied Keywords: class size
faculty workload
online courses
NAICS/Industry Codes: 611210 Junior Colleges
923110 Administration of Education Programs
Abstract: Faculty workload is based on the amount of time spent on teaching, research, and service. The workl course, course level, and instructional format. Compared with traditional face-to-face courses, online by faculty, necessitating special consideration when calculating faculty workload. The authors examin colleges, specifically, the number of online classes taught per semester, class sizes for online courses instructors is calculated. Results indicate inconsistent practices within and between institutions; the w equal to, or more than that of faculty teaching face-to-face courses. Further investigations into comm administrators and faculty to discuss workload issues are recommended. [ABSTRACT FROM AUTHOR

Author Affiliations: [1]Technology Management in the College of Technology, Indiana State University
[2]Human Resource Development Program, Indiana State University
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| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&d Instruction and Community College Faculty Workload.</a> |
| Database: | Academic Search Premier |

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| Title: | Student Evaluation of Instruction: In the New Paradigm of Distance Education. |
| Authors: | Liu, Ou[1] lliu@ets.org |
| Source: | Research in Higher Education. Jun2012, Vol. 53 Issue 4, p471-486. 16p. 5 Charts, 1 Graph. |
| Document Type: | Article |
| Subject Terms: | *STUDENT evaluation of college teachers<br>*STUDENT evaluation of curriculum<br>*DISTANCE education teachers<br>*WEB-based instruction<br>*DISTANCE education<br>*CLASS size -- Research<br>*CLASS size -- Universities & colleges |
| Geographic Terms: | UNITED States |
| Author-Supplied Keywords: | Distance education<br>eSIR<br>Hierarchical linear modeling<br>Learning outcomes |

Abstract: Student evaluation of instruction
Distance education has experienced soaring development over the last decade. With millions of students
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offer important implications for institutional administrators on utilizing the evaluation results and on deve
instructors. [ABSTRACT FROM AUTHOR]


Author Affiliations: [1]Educational Testing Service, MS16-R, 660 Rosedale Rd. Princeton 08541 USA

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Evaluation of Instruction: In the New Paradigm of Distance Education.</a>

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Title: Using Interactive Content and Online Activities to Accommodate Diversity in a Large First Y
Author(s): Snowball, J. D.
Source: Higher Education: The International Journal of Higher Education and Educational Planning,
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ISSN: 0018-1560
Descriptors: Class Size, Teaching Methods, Large Group Instruction, Case Studies, Higher Education, St
Academic Achievement, Socioeconomic Background, Economics, Economics Education, Con
Abstract: As in many universities, class sizes have increased more quickly than teaching and learning terms of socio-economic background, learning styles, English language ability and prepared methods (such as lectures and tutorials) can be combined with online teaching and learnin and to accommodate student diversity. Using a large first year Economics class as a case s A statistical model was used on a sample of 50 students to determine which online activitie students agreed that replacing one lecture a week with online activities and resources impr more lecturing and fewer online resources. Statistical finding showed that more active onli beneficial in improving student performance, but that more passive lecture capture was als
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| Number of References: | 29 |
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| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?dire Interactive Content and Online Activities to Accommodate Diversity in a Large First Year Cl |
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| Cut and Paste: | <a href="http://prozy.palomar.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=e Evaluation of Instruction: In the New Paradigm of Distance Education</a> |
| Database: | ERIC |

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