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Alumni Perspectives from C.R.E.A.M. a Flipped Classroom with Experiential Learning on a Dairy Farm



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At a time when universities question the value of dairy farms on their campuses, UNH CREAM has added value to the farm, student recruitment and created a student experience valued by veterinary & graduate schools, as well as the ag. industry



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CREAM has for 22 years used a flipped classroom, (a student centered approach) to teaching students about the dairy industry, working with dairy cattle & with each other.



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Students milk, feed and care for a 25 cow dairy herd with all heifer and calf care for additional 100 research animals every day of the school year...generating endless problems that must be solved.



Students serve on 5 standing committees each week

**Production
Breeding
Facilities
Finance &
Planning**

Initiating an additional
10 +/- subcommittees



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Students from the previous year train in the incoming class for 4 weeks in how to do chores and offer insight required in committee and business meetings





Students facilitate activities in the classroom, while also developing leadership, teamwork and communication skills through assigned team-based activities and making critical decisions for the herd.

Team Building is critical with Cooperative Learning, Team Based Learning and Problem Based Learning



Students maintain the website, run Instagram and Facebook accounts, publish newsletters 4X/year, create a chore book, a Herd Health Plan, a Recruitment brochure, and write an annual end of the year report ~40 pp

College of Life Sciences and Agriculture

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CREAM



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CREAM CLASS OF 2017-2018

**Cooperative Real Education in
Agricultural Management**

NOTICE TO THE HELP

MEET THE FACULTY:
Drew Conroy



<https://mypages.unh.edu/unhcream/about-cream>



Sixty percent of the grade comes from peer grading, 40% of the grade comes from faculty (there are no exams). The students have flexibility in the “*academic work*” they choose, but are graded heavily on initiative and follow through.



**Students have 4 hours
of class per week,
2 hours of committee
& business meetings
and another 2 hours
of instruction...**



**where they select the
speakers, have
educational activities or
may even invite the
faculty member in charge
of the class to lecture**



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Meet the Bearded Brothers Behind the American Farm

April 5, 2019 By [Janet Hester](#)

Move over Duck Dynasty. Last night, reality TV met a new set of Robertson brothers. We're not sure who has the bigger beards or sense of humor – but we're about to find out.

The brothers and their family star in the new series the American Farm which premiered on HISTORY on April 4 at 10 p.m. ET. If you miss it, you can watch it each week on the HISTORY website.



Supportive and enthusiastic alumni are invited by the planning committee to talk about their careers as farmers, agricultural professionals and veterinarians



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Students plan field trips to visit farms across New England

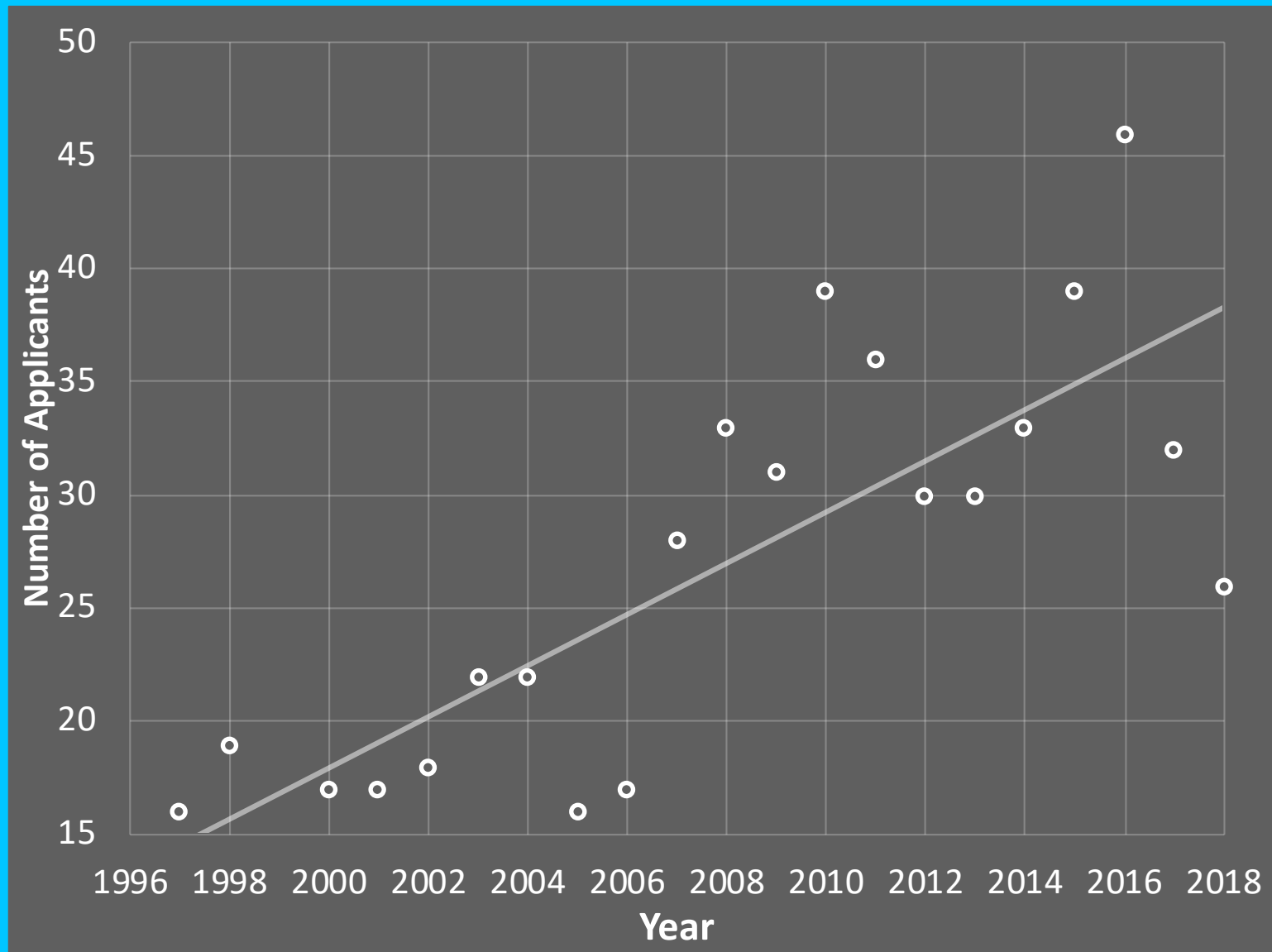


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Annually students plan, fund and hold an end of the year banquet to culminate their year and share this unique experience with their family, friends and faculty



Number of applicants to UNH CREAM/year



477 alumni of the University of New Hampshire's Cooperative Real Education in Agriculture Management course (1998-2018) were surveyed via Facebook and Email regarding experiential learning in a flipped classroom environment.



 **Drew Conroy** shared a link.
August 3, 2018 · Add Topics

I am doing a survey of CREAM alumni as part of an article I am writing about CREAM. The survey takes 5 minutes. It is very simple but would be really helpful for me to have some data to back up some statements I hope to make in the article.

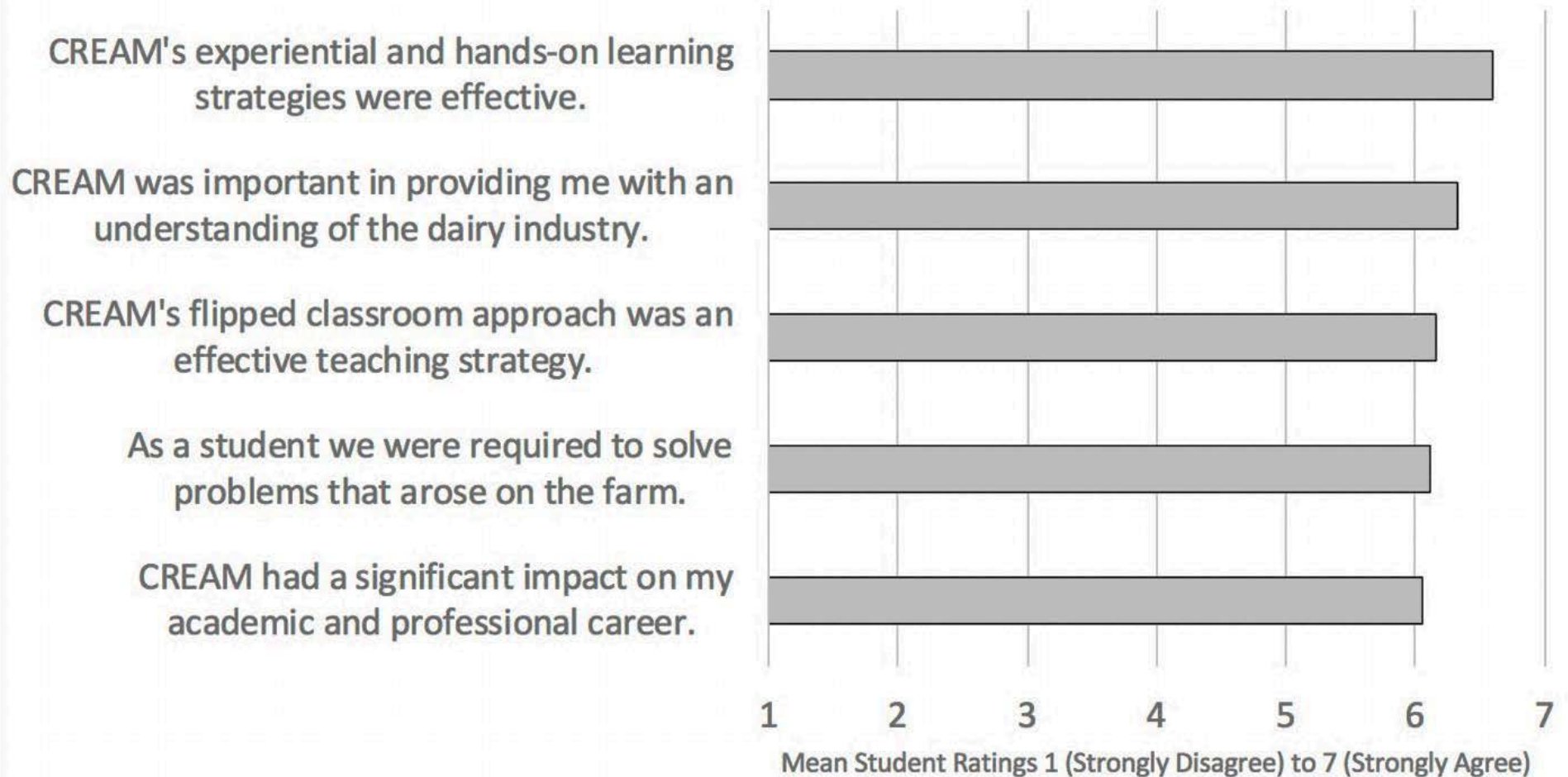
I am going to try to spread it via Facebook, etc. but any help you can provide in spreading it around to classmates you are in touch with would help a lot.

CREAM Alumni only take the survey once.... [See More](#)

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Responses in two weeks came from 220 alumni, comprising 187 women and 33 men. Majors primarily included pre-veterinary medicine (121) and animal science or dairy management (67)

Mean Students' Perceptions of Course



Hands-on Skills with Dairy Cattle	Average Alumni Ranking 1-10	Rank
Animal Health Practices	2.89	1
Dairy Cattle Feeding and Nutrition	3.39	2
Cattle Handling	3.40	3
Reproduction, Genetics and Cattle Selection	4.58	4
Milking and Milking Procedures	4.70	5
Calf Care	5.45	6
Parturition (Birthing and Birthing Process)	6.33	7
Research with Dairy Cattle	7.21	8
Farm Equipment Operation	7.76	9
Cattle Grooming	9.29	10





Interpersonal, Team and Related Skills	Average Alumni Ranking 1-12	Rank
Effective Teamwork	3.11	1
Group Decision Making	3.84	2
Oral Communication	4.16	3
Leadership	4.56	4
Initiative	4.82	5
Adaptability	5.72	6
Management of Committees and Tasks	7.56	7
Perseverance	7.62	8
Scheduling	8.23	9
Career Exploration	8.28	10
Written Communication	9.28	11
Using Technology for Communication	10.82	12





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Major Themes from Three Open Ended Questions

What part of UNH CREAM was most valuable to you:

Theme	Number of Related Responses
Teamwork and learning to work in groups	78
Hands-on work with cattle	67
Greater understanding of the dairy industry	26
Opportunities to Lead or learn Leadership skills	12
Accountability	5

What part of UNH CREAM was least beneficial to you?

Theme	Number of Related Responses
It was all beneficial	58
The drama related to peer grading	14
Learning about the dairy industry and cows	9
Committee work, finance most often mentioned	7
Clean Cow contests and grooming cows	4



	Total		Female		Male	
	N	%	N	%	N	%
Career						
Veterinary School	68	31.63	60	27.27	8	24.24
Agriculture	51	23.72	34	15.45	17	51.52
Graduate School	29	13.49	25	11.36	4	12.12
Other	27	12.56	25	11.36	2	6.06
Work with Companion Animals	21	9.77	19	8.64	2	6.06
Biotechnology Field	6	2.79	6	2.73	0	0.00
Human Health Field	5	2.33	4	1.82	1	3.03
Teaching	4	1.86	4	1.82	0	0.00
Consulting/Extension in Agriculture	4	1.86	4	1.82	0	0.00

