

INNOVATION IN CO-OP

A conceptual framework for enabling 4-year/2-co-op options that incorporate richer integration with the in-class curriculum and enhanced use of recent technology

White paper presented to Provost Director and Senior Vice President Mantella Feb., 2009 by Arvin Grabel, Seamus Harreys, Ed Klotzbier, Tom Moore, Susan Powers-Lee and Steve Zoloth

A. Rationale for Innovation

The distinction and success of Northeastern University is due in large part to its Co-op program and the innovation of Co-op over time. As the 100th anniversary of Northeastern University's flagship Co-op program approaches, Northeastern must continue to enhance its successful Co-op model to meet the academic demands and goals of its current and future students. This paper proposes adding flexibility to the Co-op program by introducing a 4-year /2-co-op model—a model which is highly appealing to various cohorts of students. The key drivers for this innovation are:

- Co-op is Northeastern's brand, its major distinguishing element in the market place and we must continue innovation to maintain our leadership in delivering a high-quality Co-op program: Integral to any Co-op innovation, Northeastern must maintain and increase its commitments including: richer integration with in-class curriculum, leadership in its academic programs, and providing graduates with lifelong learning skills.
- Many students and families seek 4-year options for various academic reasons—including students with higher academic profiles (see Attachment 1). Over 80% of new students intend to pursue a graduate or professional degree(see Attachment 2) - increasing as both the academic profile has increased and as the graduate degree has become more of a market differentiator. Compression of "time to degree" is becoming more common in the market place (shorter bachelors programs , e.g., 3 Year European Model, or shorter combined bachelor's/masters programs). Students are increasingly using their AP credits to reduce their time to degree (see Attachment 3 and 4). Currently at Northeastern, over 17% of students accelerate earning their undergraduate degrees by creating their own four-year program.
- The 4-year program appeals to international students: Northeastern is focused on increasing its international student enrollment (institutional goal of 12% by Fall 2011; up from current 6%). For some international students, the 5-year model is not well understood (especially in contrast to the 3-year model) and they face difficulty with the higher costs for the additional year (including generally higher transportation costs).
- The appeal of the cost/value of a 4 year program to some families: Students and families hold the co-op model in high regard, yet also recognize the benefit of earning an undergraduate degree in four years. Specifically, a priority for some students is to achieve the benefits of completing the Northeastern degree with the added value of Co-op at the same pace and same relative cost as students who attend traditional 4-year colleges. Some students and families are less attracted to the five year model because of the perceived cost of the 5th year and the added potential debt service.

Understanding these drivers, we propose that Northeastern enter the 2nd century of Co-op by adding a 4 –year/2 co-op option to our existing Co-op programs with the goal of meeting the needs of our current and future students. This paper further describes the 4-year/2 co-op model by detailing: 1) the operational requirements for implementing 4 year/2 co-op models, 2) examples of 4 year/2 co-op models and 3) a timeline for implementation.

B. Operational Requirements to be incorporated in the 4-year/2-co-op models

These operation requirements are necessary to successful implement any 4-year/2- co-op model:

- New models should fit within the existing programmatic structure of the units. The goal is to provide additional rich options for integrating the in-class curriculum with co-op, and to provide programming flexibility to our students. While some additional enhancements to the curriculum might result from the design of 4-year/2-co-op models, broad re-design of the curriculum is not anticipated.
- New models should fit within the best-practice structure for co-op: two co-ops to allow an iterative learning process; a year of classes and a co-op preparation course to ensure adequate preparation; and, where appropriate, co-op divisions that are populated equivalently.
- New models should be consistent with a goal of leadership in integrated online learning. Online course delivery should be of high quality and should also reflect the needs of undergraduate students for more guidance in time organization than is generally necessary for more experienced students.
- Billing and financial aid should be arranged so that (a) parents and students are not overwhelmed and (b) the stream of revenue to NU is not interrupted. Alternative financial aid years (student defined as well as program defined) can be utilized to smooth out costs among model variants and ensure the first two points.
- The value added of the 4-year, 2-co-op options should be clearly defined, and conveyed to potential parents and students concisely.
- As units develop their own models, they may identify additional logistical issues that must be addressed.

C. Examples of 4-year/2-co-op models with added/enriched integration opportunities

Each of the four 4-year co-op examples are intended to serve as models which enhancement certain aspects of the student's co-op and academic experiences.

Model A: Four years/two 6-month co-ops/two divisions

	Fall	Spring	Summer 1	Summer 2
Year 1	Class	Class	Vacation	Vacation
	Class	Class	Vacation	Vacation
Year 2	Class	Co-op 1	Co-op 1	Class
	Class	Class	Class	Co-op 1
Year 3	Class	Co-op 2	Co-op 2	Class
	Co-op 1	Class	Class	Co-op 2
Year 4	Class	Class		
	Co-op 2	Class		

- Students have 7 academic semesters, leaving need for 4 additional 4-SH courses.
- Innovation: Programs enrich integration with appropriate online courses.
 - When taken during co-op, online courses provide opportunities for enriched integration.
 - The technology is now available to allow effective delivery of online courses and effective integration of the courses with the co-op experience.

- Our present students are generally expert and enthusiastic in applying technology.
- Programs might also elect to design a set of on-line course modules (component course offerings with less than 4 SH credit).
- Availability of online courses could serve the alternative purpose of allowing transfers and students with deficiencies to readily catch up with the standard curriculum.
- All types of online courses combined with full-time work provide training in lifelong learning.
- Alternatives to online courses taken during co-op:
 - Could use AP course credit for some or all of the 4-course requirement
 - Could add online courses (or course modules) during academic terms
 - Could add standard courses during academic or co-op terms, with the downside of adding stress to tight schedules and to heavily used classrooms

Model B: Four years/two 6-month co-ops/two divisions/one additional summer minimester for classes

	Fall	Spring	Summer 1	Summer 2
Year 1	Class	Class	Class	Vacation
	Class	Class	Class	Vacation
Year 2	Class	Co-op 1	Co-op 1	Class
	Class	Class	Class	Co-op 1
Year 3	Class	Co-op 2	Co-op 2	Class
	Co-op 1	Class	Class	Co-op 2
Year 4	Class	Class		
	Co-op 2	Class		

- Students have 7.5 academic semesters, leaving need for 2 additional 4-SH courses.
- Summer1 term following freshman year is especially attractive since many friends from high school will be in programs with standard academic terms ending when the summer1 term ends, but summer2 is also an option.
- Increased use of summer for courses will require less use of classrooms and residences for alternative summer activities, e.g., high school programs, but would provide enriched course opportunities for all summer students.
- Innovation and possibilities as before for the needed two courses.

Model C: Four years/one 6-month co-op with two divisions/one 4-month summer co-op

	Fall	Spring	Summer 1	Summer 2
Year 1	Class	Class	Vacation	Vacation
	Class	Class	Vacation	Vacation
Year 2	Class	Class	Co-op (4 month)	Co-op (4 month)
	Class	Class	Class	Co-op
Year 3	Class	Co-op	Co-op	Class
	Co-op	Class	Co-op (4 month)	Co-op (4 month)
Year 4	Class	Class		
	Class	Class		

- Students have 7.5 academic semesters, leaving need for 2 additional 4-SH courses.

- 4-month co-ops are especially attractive for some majors, and work permit rules dictate a 4-month term for some international co-ops. In some units, 4-month internships would be appropriate (and would be accompanied by some course credit).
- Innovation and possibilities as before for the needed two courses.

Model D: Four years/one 6-month co-op with two divisions/one 4-month summer co-op/one additional summer “minimester” for classes

	Fall	Spring	Summer 1	Summer 2
Year 1	Class	Class	Class	Vacation
	Class	Class	Class	Vacation
Year 2	Class	Class	Co-op (4 month)	Co-op (4 month)
	Class	Class	Class	Co-op
Year 3	Class	Co-op	Co-op	Class
	Co-op	Class	Co-op (4 month)	Co-op (4 month)
Year 4	Class	Class		
	Class	Class		

- Students have 8 academic semesters.
- Have no need for additional courses but might elect the online option to allow sampling of graduate courses, work in additional, fields, etc.

D. Timeline for Implementation

The goal will be to offer freshman entering in 2011 the opportunity to choose the 4-year/2-co-op option. All marketing and recruiting material must be in place by July 1, 2010.

By having the 4-year/2-co-op option in place before September of 2010, we can allow freshman entering in 2010 the option of following the 4 year model even though it was not marketed to them. This allows a “soft-start”, giving the Colleges to work out logistical issues with a smaller cohort of students in this new model.

In order to recruit the incoming class of 2011 with the additional option of a 4-year/2-co-op model, the following timeline is suggested:

1. February, 2009 – The 4-year/2 co-op model is presented to the Dean’s Council for review and approval. Deans immediately begin discussions with their faculty to explore options for making this model operational for their own College. In addition, the Provost should report back to the Senate Agenda Committee regarding this report as well as be prepared to speak to community.
2. June, 2009 – Where appropriate, Colleges appoint working groups to convert the conceptual 4-year/2-co-op plans into operational plans with all the details necessary to execute these plans.
3. September/October, 2009 – College Faculties review and approve the operational plans completed over the summer, and present any curricular issues that require approval to the UCC and Faculty Senate.
4. January, 2010 – Senate completes the review and approval of any significant curricular issues necessary for full implementation of the 4-year/2 co-op model.

5. February, 2010 – The 4-year/2 co-op models are handed off to the appropriate University offices, including the Registrar, Financial Aid, Student Services, etc., to ensure that systems are developed or modified to support the models.
6. July, 2010 – Undergraduate Admissions completes the development of marketing and recruiting materials that describe and promote the 4-year/2 co-op model as an innovative alternative to the traditional 5-year co-op model.
7. September, 2010 – Incoming freshman will be introduced to the 4-year/2 co-op model and offered the opportunity to select this option on a limited basis. This will allow Colleges to begin fine tuning the systems and logistics to prepare for a full roll out of the new model for incoming freshman in 2011.
8. September, 2011 – Incoming freshman will arrive on campus with the full knowledge of the two co-op models, the traditional 5-year plan and the new 4-year/2 co-op plan. Full scale implementation takes place.

Attachment 1: Entering Academic Profile: Time to Degree
 Entering SAT, HSGPA of Graduates Entering 2002

	<u>SAT</u>	<u>HS GPA</u>
<u>University</u>		
4 Years	1172	3.36
5 Years	1156	3.21
6 Years	1144	3.27
<u>A&S</u>		
4 Years	1185	3.42
5 Years	1177	3.28
6 Years	1126	3.20

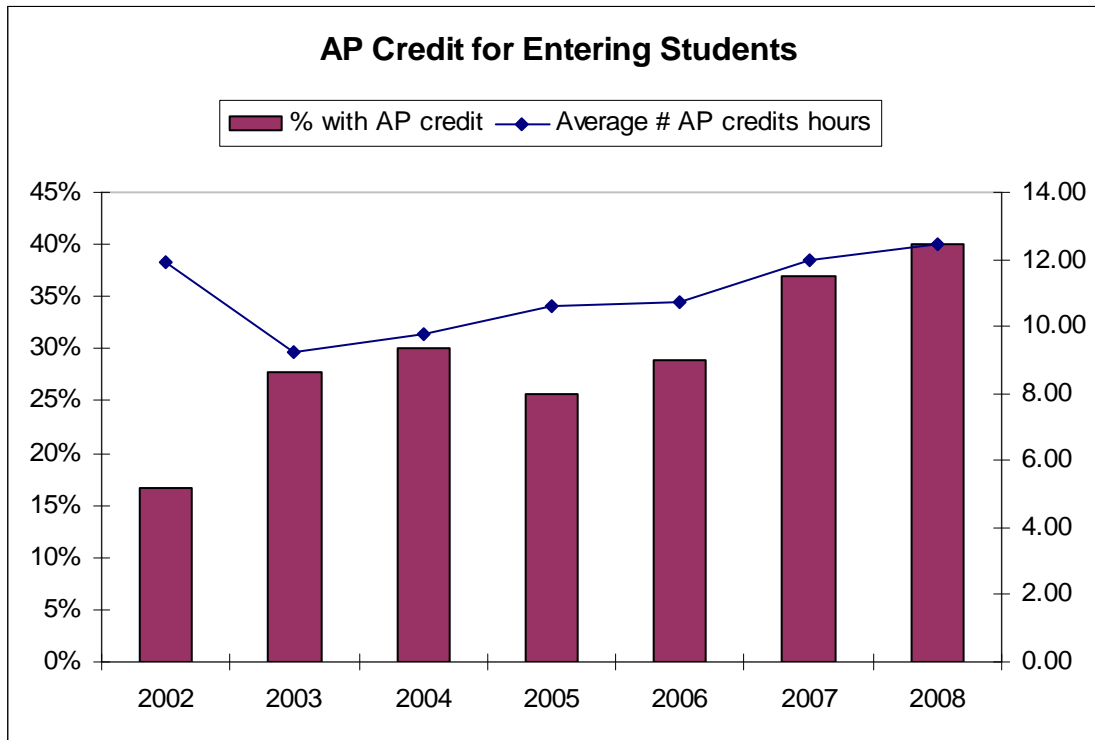
Attachment 2: Fall 2007 New Students: Highest Degree Planned

	Count	%
Bachelor's Degree	411	16%
Master's Degree	1284	50%
Doctorate	485	19%
MD, DO, DDS, etc.	247	10%
Law (JD)	152	6%
Total	2579	
Post Bachelors Intention		84%

Source: CIRP Survey of Northeastern Freshmen

Attachment 3: AP Credit for Entering Students

% with AP Credit and Average AP Credit



Attachment 4: Percent of Graduates with AP Credit: by Years to Degree Cohort entering 2002

