

Connecting Students to Northwestern Forever

2003-03-11 ben@slivka.com Flesh out with examples, chronology, issues
2003-02-16 ben@slivka.com Initial draft

1	Goal.....	1
2	Notes and Assumptions	1
3	Summary	2
4	Phases of a Northwestern Student’s Life.....	2
5	Tools	2
6	Chronology.....	4
7	Technology.....	5
7.1	Digital Media Longevity.....	5
7.2	Authentication Directory	5
7.3	Web Server.....	5
7.4	Web Page Authoring Tools	5
7.5	Forum (Discussion Group) Server	5
8	Issues.....	5
8.1	Tension Between Class Cohesive and Campus Integration	5
8.2	Privacy and Security	5
8.3	E-mail address vs. NU netid.....	6
8.4	Inappropriate or Offensive Content	6
8.5	Content Quotas.....	6
9	Top 24 Universities – Alumni Giving (USNWR)	7

1 Goal

In the four years since I joined the Northwestern board of trustees, the issues of low alumni giving rates and on-campus satisfaction of undergraduates have been discussed on a regular basis. Board members, administrators, and staff appear to have converged on the idea that improving the “connectedness” of students while they are on campus to each other and to the University will address both of these issues in a fundamental way.

The goal of this paper is to describe how digital media and tools – computers, web sites, e-mail, streaming media, discussion groups, etc. – can be used to address these issues.

Use digital media and tools to help Northwestern undergraduate students establish and maintain lifelong connections with each other and Northwestern.

2 Notes and Assumptions

- Undergraduates: While Northwestern enrolls graduate students in professional master’s degree programs as well as doctoral programs with a more academic focus, this document will focus on undergraduates, as individuals tend to bind most closely to their undergraduate institution;
- Shared Experiences: We assume that shared experiences are key to binding people together, so we want to foster, encourage, and support shared experiences;
- Student-Directed Activities: While there are many University-directed activities that may contribute to shared experiences, the focus of this document is on student-directed activities;
- Digital Storage Forever: We assume that digital storage will get exponentially cheaper and more capacious, so all digital media collected as part of this effort is never, ever destroyed;

- e) Implement Core Ideas Soon: Some of the ideas in this document are easy to implement, while others are difficult and/or expensive with existing technology; I've listed most of my ideas in order to flesh out the vision, but I do not expect we have to implement all of these right away;
- f) Class of 2007: To make this document more concrete, we will use imaginary student names for the undergraduate Class of 2007;

3 Summary

By way of example, let us assume Sarah K. Smith applies for admission to Northwestern in the Fall of 2002 for the class of 2007:

- Sarah.K.Smith@2007.northwestern.edu is her formal e-mail address;
- SoccerNut@2007.northwestern.edu is her informal e-mail address;
- www.2007.northwestern.edu is the home page for the Class of 2007 – online directory (“facebook”) with a head shot, detailed personal profile, and directory search, personal, group, and event web pages, forums (discussion groups), newsletters, weblogs, and links to archives of digital media relevant to the Class of 2007;
- www.2007.northwestern.edu/people/SKSmith is her personal web site; she would likely have both her “professional” content – resume, “portfolio”, etc., as well as her “personal” content -- weblog, photos, essays, and links;
- www.2007.northwestern.edu/group/WildStorm is her intramural soccer team web site;
- www.2007.northwestern.edu/event/DilloDay2004 is her record of Dillo Day 2004;
- www.northwestern.edu/2003-2004 is a digital archive (maintained centrally by the University) of the 2003-2004 school year – pictures, video streams, and articles of sporting, theatrical, musical, social, and academic events and happenings on campus and in the world;

4 Phases of a Northwestern Student’s Life

High School	Northwestern	Life
<ul style="list-style-type: none"> • Apply to NU • Admitted to NU • Accept Northwestern 	<ul style="list-style-type: none"> • Study, Part-time Work • Play • Dating • Organize/Volunteer 	<ul style="list-style-type: none"> • Work • Play • Marry/Family • Give Back

The table above is one way to view the phases of the lives of students that experience before, during, and after Northwestern. I have deliberately listed the Northwestern and Life activities in a parallel form to emphasize the way in which University is like the real world with training wheels. For example, the “work” of a student is classes, studying, homework, and projects, and mirrors the tasks they will perform in the real world of “work”. The proposals in this document start with a student being admitted to Northwestern, and continue to support the student through the rest of her life.

5 Tools

Tool	Notes
<i>Formal e-mail address</i> Sarah.K.Smith@2007.northwestern.edu	This address never changes; The student may at anytime, even before arriving on campus, configure this into a forwarding e-mail account (e.g., forward all e-mail to sarah@smithfamily.org)
<i>Informal e-mail address</i> SoccerNut@2007.northwestern.edu	This address also lives forever, but is more “friendly”; it can also be configured to forward all e-mail;
<i>Class Web Site</i> www.2007.northwestern.edu	The class web site; contains the class directory, personal, group, and event web pages, forums (discussion groups), links to key services on www.northwestern.edu , web logs and newsletters, and links to digital media archives created and maintained centrally by the University (e.g.,

	www.northwestern.edu/2003-2004)
<p><i>Class Directory</i> www.2007.northwestern.edu/people</p>	<p>This a much-enhanced, online version of the “freshman facebook” published each fall for the entering class by the Alumni Association; each class member can edit her own profile: nickname, school, major, favorite musical groups (ex: Rolling Stones), favorite brands (ex: Nike, Diesel), hobbies (ex: model rockets, foosball), interests, causes (ex: PETA, Greenpeace), sports (ex: Sonics, frisbee), instant messaging handles (AIM, MSN, Yahoo, ICQ, etc.), personal web page, and an essay;</p> <p>This directory is protected – you must login and be authenticated to search and view the directory;</p> <p>You can search the directory in rich ways, and save searches as “alerts”, so that when a classmate changes her profile in a way that causes her to be returned by your saved search, you are sent an e-mail about that change. Ex: You like the new band GrungyWorm, so you put that in your profile and save a search; Steve later updates his profile with GrungyWorm, and the system sends you an e-mail automatically;</p> <p>There is a “facebook” view of the directory that lets you page through the directory quickly and easily to see everyone in the class;</p>
<p><i>Forums</i> www.2007.northwestern.edu/forums</p>	<p>Discussion groups for the class; can be created by any class member; viewing and posting limited to members of this class only; each forum will have a small number of forum “managers” (specified by the forum creator) who can restrict access, purge inappropriate posts, and generally manage the forum;</p> <p>These are clearly useful before the student arrives on campus, perhaps during the summer, and again when the student leaves campus. But do they see much use on-campus, when students may have less class identification?</p>
<p><i>Personal web site</i> www.2007.northwestern.edu/people/SKSmith</p>	<p>This site is created for the student when she is admitted; Sarah is able to use standard (free!?) tools to add content to her web site;</p>
<p><i>Group web sites</i> www.2007.northwestern.edu/group/WildStorm</p>	<p>A web site intended to hold content for a group of people, with more than one person having authoring privileges; this is Sarah’s intramural soccer team;</p>
<p>Event web sites www.2007.northwestern.edu/event/DilloDay2004</p>	<p>A web site intended to hold content for a particular event; this is Sarah and Steve’s pictures and ramblings about Dillo Day 2004;</p>
<p>School Year web sites www.northwestern.edu/2003-2004</p>	<p>The university provides a root directory for each school year; archivists employed by the university put information here (possibly with the help of many work/study students!); contains pictures, video streams, and articles of student sporting events (2000 Michigan football game nailbiter), student musical and theatrical performances (Waa-Mu, Dolphin Show), speeches by members of the University</p>

community as well as visiting speakers (Kofi Annan at 2002 Commencement), the Daily Northwestern, the Syllabus;

6 Chronology

Here is a narrative account of how Sarah and her friends use the 2007.northwestern.edu tools to connect with each other and the University over a 10 year period

When	What
Fall 2002	<p>For her Class of 2007 application, Sarah supplies her desired “formal” and “informal” email addresses, her personal web page directory, and a photo (headshot) of herself in JPEG format.</p> <p>Sarah.K.Smith@2007.northwestern.edu is Sarah’s formal e-mail address; soccernut@2007.northwestern.edu is her informal address; www.2007.northwestern.edu/SKSmith is her personal web page directory;</p>
April 2003	<p>Sarah receives an email (and snail mail) informing her of her acceptance to Northwestern, which includes her 2007.northwestern.edu e-mail addresses;</p> <p>Sarah logs into http://www.2007.northwestern.edu with her e-mail address and password (default, her SSN?); She fills in her profile with more information about herself: her high school, hobbies, favorite movie stars and musical groups, favorite books, her intended major;</p> <p>She checks out the forums (discussion groups), registers for the “Marching Band” forum, and creates the “Soccer” forum; she also registers to be notified when new freshman living within a 25 mile radius of her home in Seattle, WA, accept admission;</p>
May 2003	<p>Sarah receives e-mail notices as incoming freshmen near her accept admission to NU;</p> <p>She checks out the profiles of newly admitted students near her, finds that someone else from her high school that she doesn’t know is going to NU, and finds two girls in other schools nearby who like the same bands she does; she sends each of them double-blind e-mail to see if they want to get together during the summer;</p> <p>She uses the “campus links” to find existing clubs and organizations on campus that she wants to investigate. She sends e-mail to the editor of the Daily Northwestern to find out about reporting opportunities in the fall; And she starts learning more about Sheppard Residential College, where she will live her freshman year;</p>
Sep 2003	<p>As she meets other freshmen on campus she uses www.2007.northwestern.edu to look up more information about them; and she uses the upperclassmen sites (2006, 2005, 2004) to learn more about upperclassmen [<i>Privacy Issue</i>];</p>
Oct 2003	<p>Sarah creates www.2007.northwestern.edu/group/WildStorm for her intramural soccer team “WildStorm”; she puts on a roster page, keeps the team schedule and scoring results, and posts a team photo and photos from their games;</p>
Sep 2004	<p>Sarah submits a new, recent picture for the “sophomore” facebook [retain older pictures, for a retrospective in the future]</p>
June 2007	<p>Sarah updates her home page with “I’m graduating”, pictures of “senior week”, and notes about moving to Florida and starting her new job with the Florida Citrus Foundation;</p>
Jan 2008	<p>Sarah starts working with fellow classmates on their 1st reunion, creating www.2007.northwestern.edu/reunion2008</p>
Oct 2008	<p>Sarah posts photos from her 1st reunion on /reunion2008/</p>
Jan 2012	<p>The fifth reunion is approaching, /reunion2012/ is created.</p>
Oct 2032	<p>Sarah posts photos from her 25th reunion on /reunion2032/</p>

7 Technology

7.1 Digital Media Longevity

We assume that digital formats like HTML, JPEG, MP3, and MPEG will be long-lived formats – 50 or even 100 years from now these data formats will be able to be read with very high fidelity.

7.2 Authentication Directory

We will need to build or buy a system that stores and maintains and authenticates members of the NU community using their lifetime e-mail address (e.g., Sarah.K.Smith@2007.northwestern.edu).

7.3 Web Server

We need a low-cost, commodity web server that integrates with the Authentication Directory (above), so that it is easy for students to create new web pages and control who has the authority to modify individual web directories.

Example 1: www.2007.northwestern.edu/people/SKSmith is Sarah's home page, and she is the only one allowed to edit these pages;

Example 2: www.2007.northwestern.edu/group/WildStorm is Sarah's intramural soccer team home page, and she and Mary.W.Johnson@2007.northwestern.edu and Arayah.Alani@2007.northwestern.edu all have authoring privileges;

7.4 Web Page Authoring Tools

What web page authoring tools should we support? It should be a tool that integrates in the simplest way possible with the Web Server and Authentication Directory we select, and should be free or amazingly low cost, so that incoming freshmen can start working on their web pages before they arrive on campus.

7.5 Forum (Discussion Group) Server

We need to identify one of these that integrates with our Authentication Directory.

8 Issues

8.1 Tension Between Class Cohesive and Campus Integration

Will increasing the sense of class cohesiveness reduce the amount of interaction between students of different graduating classes, or interactions with other constituencies on campus?

8.2 Privacy and Security

Providing all this personal information on a web site creates the possibility that this information might be used inappropriately (stalking, identity theft). We need to provide opt-out mechanisms and strong security and monitoring to prevent and detect inappropriate use.

I assume that members of a particular graduating class should have lifetime access to the directories for other graduating classes who are on campus with them. For example, the Class of 2007 is, over four years, on campus with the classes of 2004, 2005, 2006, 2008, 2009, and 2010.

Directory information is the most important information to protect.

We assume that personal and group web sites would be accessible to the world, so students would take responsibility for the content they post there.

8.3 E-mail address vs. NU netid

It would be ideal if students and alumni could use their lifetime e-mail address to access all University digital resources. But the current netid system is limited to 8 characters with no punctuation. So will students require a netid when on campus? Can we upgrade the netid infrastructure, and systems that rely upon netid authentication, to support the long e-mail addresses? How does this integrate with the Authentication Directory?

8.4 Inappropriate or Offensive Content

It is possible (and even likely) that students will place inappropriate content on their web pages. If a policy does not exist already to address this issue, one should be created. We do not want to be in the business of pre-approving student content, and I do not believe we should have a "content policing group" whose job it is to scan student web sites looking for violations of our policy. We should instead count on others to report content that violates our "website content" policy.

8.5 Content Quotas

We will need some policies to limit that amount of information in email boxes and personal, group, and event web sites. Given that hard disks capacities are increasing and prices are decreasing (both exponentially) and that not every student will take advantage of this resource, we can set pretty generous maximums.

Note that my from my three-week trip to New Zealand in 2002, using a state-of-the-art digital SLR camera (6mp), I posted 1,411 photos consuming 3.3Gb.

I suggest a 10Gb "soft" quota (we warn students, give them a chance to reduce their usage or explain why they need more) for 2002-2003, and then we revisit this each year.

How will we account for storage consumed by /group/ and /event/ web sites?

9 Top 24 Universities – Alumni Giving (USNWR)

Rank	School	Score	Peer Assessment	Graduation & Retention rank	Faculty resources rank	% of classes under 20	% of classes with 50 or more	Student/Faculty ratio	% of full-time faculty	Selectivity rank	SAT/ACT 25th-75th percentile	Freshmen in top 10% of HS class	Acceptance rate	Financial Resources rank	Alumni Giving Rank	Alumni Giving Rate	Rank - Alumni Giving Rank
1	Princeton University (NJ)	100	4.9	1	2	73%	10%	6/1	92%	2	1380- 1560	93%	12%	11	1	64%	0
2	Harvard University (MA)	98	4.9	2	3	70%	13%	8/1	91%	1	1380- 1570	90%	11%	10	4	47%	-2
2	Yale University (CT)	98	4.9	3	9	76%	9%	7/1	90%	3	1360- 1540	95%	14%	2	6	45%	-4
4	California Institute of Technology	93	4.7	23	3	69%	6%	3/1	97%	6	1460- 1580	98%	15%	1	11	38%	-7
4	Duke University (NC)	93	4.6	7	6	68%	7%	8/1	97%	11	1320- 1500	86%	26%	5	5	46%	-1
4	Massachusetts Inst. of Technology	93	4.9	9	17	59%	15%	7/1	90%	4	1410- 1560	98%	17%	5	10	39%	-6
4	Stanford University (CA)	93	4.9	7	15	68%	14%	7/1	99%	4	1360- 1550	89%	13%	9	9	39%	-5
4	University of Pennsylvania	93	4.5	12	1	71%	8%	7/1	89%	8	1310- 1490	92%	22%	5	7	41%	-3
9	Dartmouth College (NH)	87	4.4	5	20	59%	11%	9/1	87%	10	1330- 1510	86%	23%	13	2	49%	7
10	Columbia University (NY)	86	4.6	12	14	68%	9%	7/1	92%	7	1320- 1510	87%	12%	20	18	32%	-8
10	Northwestern University (IL)	86	4.4	9	9	70%	9%	7/1	94%	19	1300- 1480	82%	34%	11	24	30%	-14
12	University of Chicago	85	4.7	23	6	62%	5%	4/1	95%	23	1300- 1490	80%	44%	16	27	29%	-15
12	Washington University in St. Louis	85	4.1	19	11	70%	9%	7/1	90%	16	1310- 1470	89%	23%	3	7	41%	5
14	Cornell University (NY)	84	4.6	12	22	44%	23%	13/1	98%	14	1270- 1470	82%	27%	16	14	37%	0
15	Johns Hopkins University (MD)	83	4.6	20	26	56%	18%	9/1	93%	25	1320- 1490	73%	34%	3	32	28%	-17
15	Rice University (TX)	83	4.2	16	3	69%	8%	6/1	89%	12	1320- 1520	85%	23%	26	14	36%	1
17	Brown University (RI)	82	4.4	5	26	60%	14%	10/1	93%	9	1290- 1490	87%	16%	28	11	38%	6
18	Emory University (GA)	79	4	23	6	66%	7%	7/1	93%	20	1300- 1460	90%	43%	13	19	32%	-1
18	University of Notre Dame (IN)	79	3.9	3	19	52%	11%	12/1	85%	14	1260- 1450	84%	36%	45	3	48%	15
20	University of California – Berkeley *	78	4.8	23	38	57%	15%	16/1	91%	12	1170- 1440	99%	25%	38	92	17%	-72
21	Carnegie Mellon University (PA)	77	4.2	38	13	69%	8%	10/1	97%	27	1280- 1470	72%	31%	19	34	28%	-13
21	Vanderbilt University (TN)	77	4.1	28	11	67%	5%	9/1	89%	29	1230- 1400	74%	46%	20	27	29%	-6
23	University of Virginia *	76	4.3	9	35	49%	15%	16/1	95%	20	1210- 1420	82%	38%	66	30	29%	-7
24	Georgetown University (DC)	75	4	12	44	58%	9%	11/1	87%	16	1290- 1460	79%	21%	32	24	30%	0

<http://www.usnews.com/usnews/edu/college/rankings/premium/natudoc/tier1/t1natudoc.php>

US News & World Report, America's Best Colleges 2003