

Using Formative Assessment in Teaching Information Literacy

Neil Krasnoff, Highland Park ISD

Jane Stimpson, Lone Star College Cy-Fair

Overview

- Formative assessment survey
- Definitions of FA
- Three methods of conducting FA with one-shot instruction sessions:
 - Beginning of class: gauge students' existing knowledge
 - During/End of class: test students' grasp of a concept / check for understanding
 - Days/weeks after class: individual feedback before students complete research project
- FA for marketing and advocacy

Welcome!

Let's learn about formative assessment by trying one.

Fill out a short survey at the shortened URL or scan the QR code:

goo.gl/Mb9zSm



Formative assessment defined

a range of formal and informal assessment procedures conducted by teachers during the learning process in order to modify teaching and learning activities to improve student attainment

-Wikipedia

Formative assessment defined in education literature

“...activities undertaken by teachers, and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged.” (Black and Wiliam, 1998)

“...delivers information *during* the instructional process, *before* the summative assessment. Both the teacher and the student use formative assessment results to make decisions about what actions to take to promote further learning.” (Chappuis and Chappuis, 2007)

“...a series of activities in which instructors or students or both use assessment-based evidence to adjust their teaching or learning.” (Dunaway and Orblych, 2010)

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in education*, 5(1), 7-74.

Chappuis, S., & Chappuis, J. (2007). The best value in formative assessment. *Information Assessment*, 65(4), 14-19.

Dunaway, M.K., & Teague Orblych, M. (2011). Formative assessment: Transforming information literacy instruction. *Reference Services Review*, 39(1), 24-41.

Discussion of results

Let's view our survey results using Google Forms' instant results feature.

Data may suggest a need for more information about Google Forms.

Google Form example: Scholarly sources

Simple survey and results:

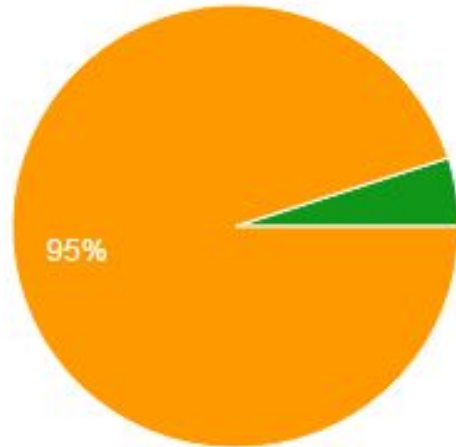
goo.gl/pXBNC2



Class results from scholarly sources survey

Judging by the citation, which of these articles is a scholarly source?

(20 responses)

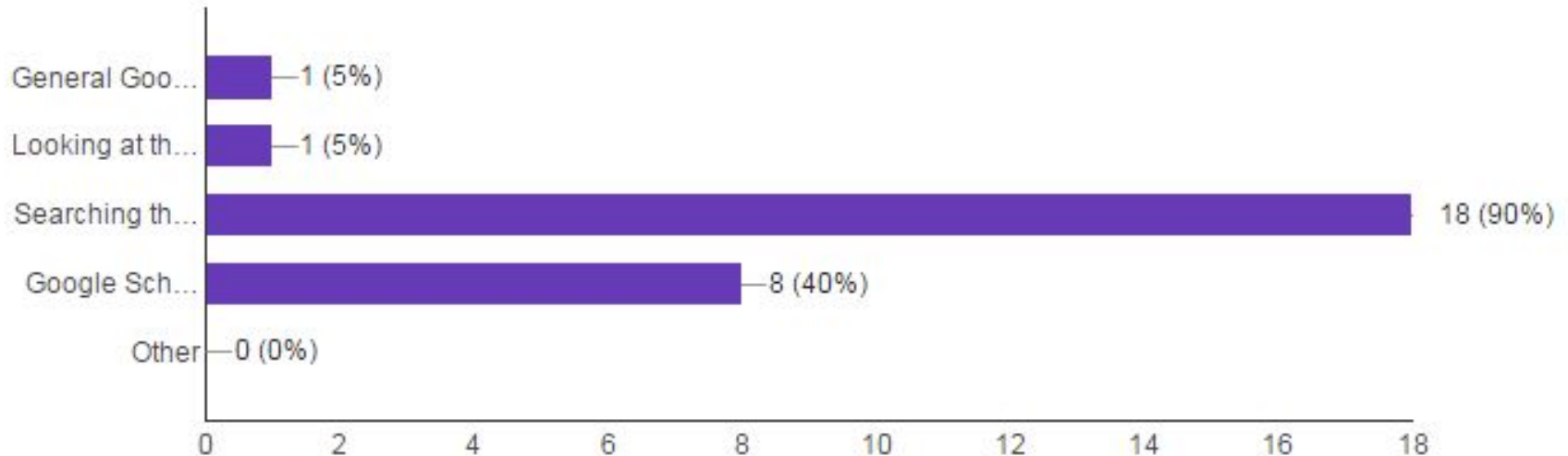


- If the genes fit .. (1994, Oct 10). People Weekly, 42, 61. Retrieved from <http://search.proquest.com/do...>
- Science takes the stand. (1994, Jul 11). U.S.News & World Report, 117, 29-31. Retrieved from <http://search....>
- Caudill, D. S. (2008). DNA AND THE GENEALOGY OF SCIENTIFIC TRU...
- Perry, Melissa Harris. "How the OJ Simpson Case Changed Views of..."

Class results from scholarly sources survey

Which of these methods would you use to find 'scholarly sources?'

(20 responses)



Google Form example: Credibility

More complex survey asking students to evaluate sources in context via direct links:

goo.gl/yvl372



Open-ended questions identify student habits, methods and assumptions

Example:

1. Describe method for finding a 'conservative' or 'liberal' news source related to assignment
2. Paste link to a good article from one of these sources.

Open-ended questions lead to class specific discussions and talking points

1. Is NPR liberal? Compared to Mother Jones, etc.
2. Using Opposing Viewpoints Gale Database to identify perspectives on issue.
3. Besides Fox News, Red State and Wall Street Journal, what are other conservative sources?

Now let's do an informal formative assessment

Are you learning anything so far?

Yes



A little



No



Using FA to take “knowledge snapshots”

- Kick off a one-shot with a Think/Pair/Share or survey to gauge students' self-reported knowledge or perception of information literacy concepts
 - EDUC 1300 and “Library Tours”
 - CHEM 2324
 - ENGL 1301 and 1302
- Tools used: Kahoot! and Google Forms

Think/Pair/Share question

What is the most
challenging / annoying / confusing thing
about research assignments?

CHEM 2324

On a scale of 1-5, how would you rate your experience so far with peer-reviewed articles? *

1 2 3 4 5

Never used them, no clue what they are or how
to find them



Very comfortable reading and
searching for them

Have you ever completed an assignment that required peer-reviewed articles as research sources? *

- Yes
- No
- Not sure

Have you ever used a library research database to search for peer-reviewed articles? *

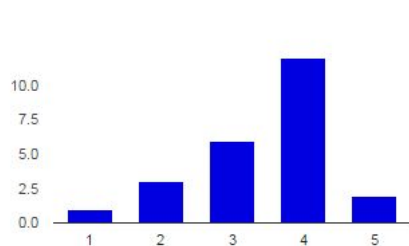
- Yes
- No
- Not sure

Please share questions, comments, or frustrations you might have about doing research projects

Be brief, 2-3 sentences max

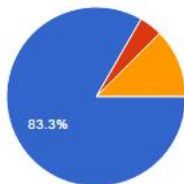
CHEM 2324

On a scale of 1-5, how would you rate your experience so far with peer-reviewed articles?



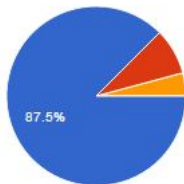
Never used them, no clue what they are or how to find them:	1	1	4.2%
	2	3	12.5%
	3	6	25%
	4	12	50%
Very comfortable reading and searching for them:	5	2	8.3%

Have you ever completed an assignment that required peer-reviewed articles as research sources?



Yes	20	83.3%
No	1	4.2%
Not sure	3	12.5%

Have you ever used a library research database to search for peer-reviewed articles?



Yes	21	87.5%
No	2	8.3%
Not sure	1	4.2%

CHEM 2324 open-ended comments

- just doing the paper. The search part is much easier to me
- most of my time goes towards finding a certain type article
- First time doing it with library research database
- Finding an article that is really long, but only having a small amount of information on your subject.
- typically google is much quicker and less stressful
- When researching on a project, I feel that it is most frustrating to find relevant information on the topic that the presentation is supposed to cover. Finding relevant information that is specifically related to the topic is most confusing.
- IT WAS ALWAYS DIFFICULT GETTING THE REQUIRED INFORMATION ON MY PAPER

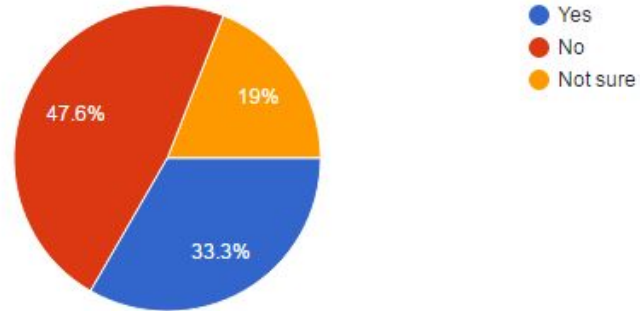
ENGL 1301

Kahoot!

STUDENT	in the CyFair Library?	in a class with a CyFair librarian?	topic for your research paper?	an online library database before?	the Academic Search	MLA format on a writing assignment?
Rick	Yes	Yes	Yes	Yes	No	Yes
What are those!	No	Yes	Yes	Yes	Not sure	Yes
BOOSHE100	No	Yes	Yes	Yes	Not sure	Yes
brownhammer	No	No	Yes	Yes	Yes	Yes
Chris	No	Yes	Yes	No	No	Yes
Z-wizzy	No	Yes	Yes	No	No	Yes
Ashley	Yes	Yes	Yes	Yes	No	Yes
Steven	No	No	Yes	Yes	Yes	Yes
bigblack42	No	Yes	Yes	No	No	Yes
swaino	No	Yes	Yes	Not sure	Not sure	Not sure
Andrew	Yes	Yes	Yes	Yes	No	Yes
Wallis	No	Yes	Yes	No	No	Yes
Goku		Yes	Yes	No	No	Yes

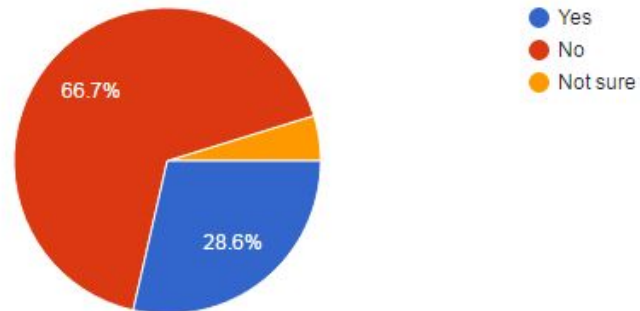
ENGL 1301

Have you ever written a research paper? (21 responses)



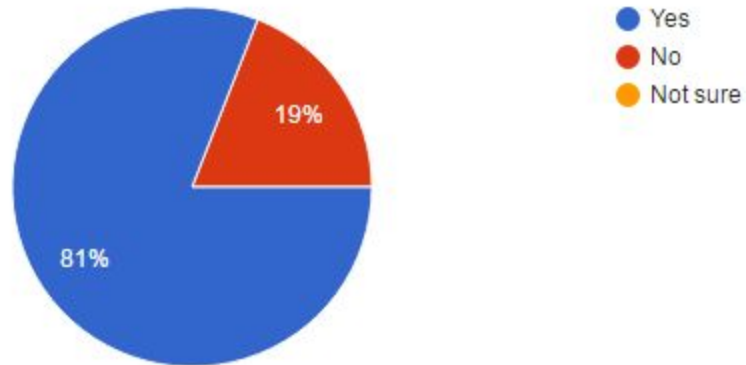
Have you ever used the library catalog or databases to find sources about a research topic?

(21 responses)



ENGL 1301

Have you ever formatted a paper / cited sources in MLA style? (21 responses)



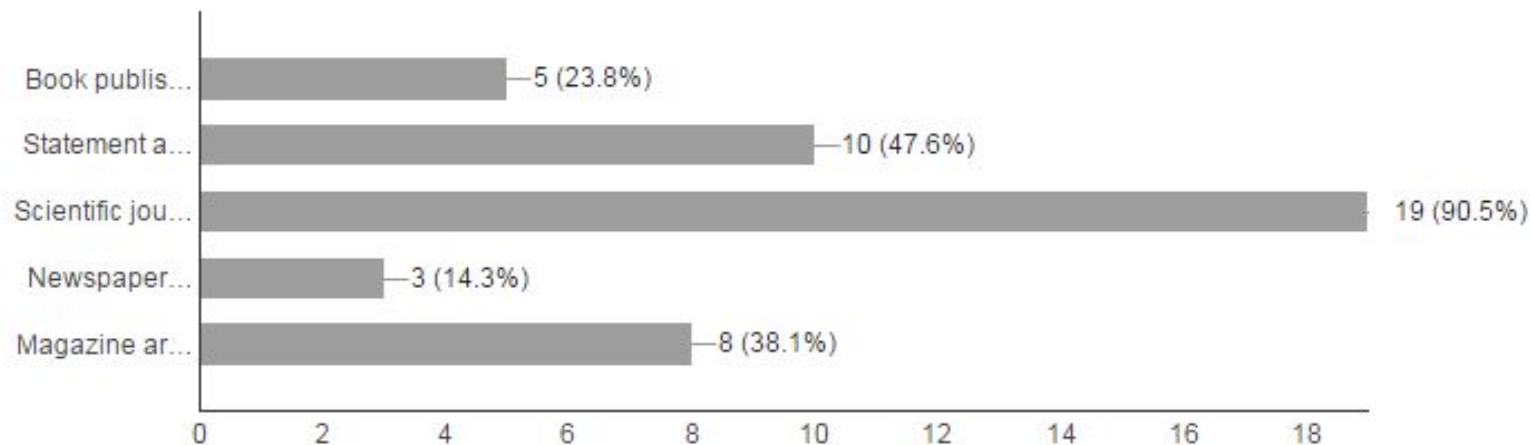
If you were writing a paper about the recent crisis of lead-contaminated tap water in Flint, Michigan, what sources of information do you think would be most helpful?

(21 responses)

- Book published in 2003 about lead poisoning
- Statement about the crisis on the official website of Michigan's governor
- Scientific journal article about how lead reached Flint's drinking water
- Newspaper article published last month with quotes from famous celebrities about the crisis
- Magazine article published this month with a timeline and detailed explanation of the crisis so far

If you were writing a paper about the recent crisis of lead-contaminated tap water in Flint, Michigan, what sources of information do you think would be most helpful?

(21 responses)



ENGL 1301 open-ended comments

- Differences between the research paper itself and the annotated bibliography, how they look.
- Sometimes when doing research some articles are too biased and maybe the library doesn't have any suitable books
- Not finding helpful information and not knowing if my research has enough content.
- Finding a government based website that allows me to have concrete evidence for my research topic.
- The format for citing is somewhat confusing and it is sometimes hard to find an author for an article.
- How do I get a cited paper or sentence? Where do I go for that? Is there a way for that that can be easier?
- Where should I go to find online books? Do I need to buy them or there are free books?
- It is sometimes confusing because most websites say they have information about a certain topic but have false detailing. The library is frustrating because I am not familiar with any library things.

ENGL 1302

APA

Have you ever written a paper or completed an assignment that required you to use APA format?

- Yes
- No
- Not sure

On a scale of 1 - 10, how knowledgeable do you feel you are about APA format?

1 2 3 4 5 6 7 8 9 10

WTF is APA? APA is my BFF

What does APA stand for? *

- Assignment Paper Application
- Adorable Puppy Anthem
- American Psychological Association
- American Paper Association

Why do we use APA format? *

Check all that apply

- Follow rules for written paper style (heading, margin size, page numbers, etc.)
- Provide information about the sources we used to write a research paper
- Be consistent with abbreviations, acronyms, and numbers
- All of the above

Let's say you find a book with details about your research paper topic. You summarize the details in your own words and put it in your paper. Do you have to cite that information? *

- Yes
- No
- Maybe

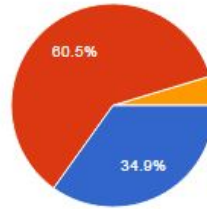
Write in any questions/frustrations/comments you have about citing sources in general or using APA format specifically

Be brief! 2-3 sentences max

ENGL 1302

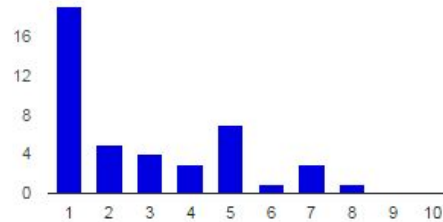
APA

Have you ever written a paper or completed an assignment that required you to use APA format?



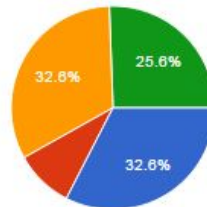
Yes	15	34.9%
No	26	60.5%
Not sure	2	4.7%

On a scale of 1 - 10, how knowledgeable do you feel you are about APA format?



WTF is APA?: 1	19	44.2%
2	5	11.6%
3	4	9.3%
4	3	7%
5	7	16.3%
6	1	2.3%
7	3	7%
8	1	2.3%
9	0	0%
APA is my BFF: 10	0	0%

What does APA stand for?

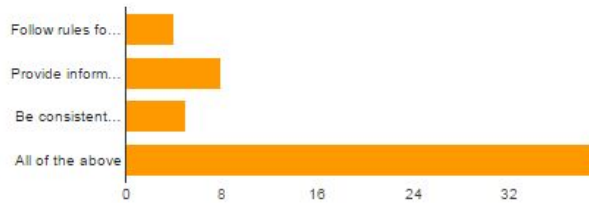


Assignment Paper Application	14	32.6%
Adorable Puppy Anthem	4	9.3%
American Psychological Association	14	32.6%
American Paper Association	11	25.6%

ENGL 1302

APA

Why do we use APA format?



Follow rules for written paper style (heading, margin size, page numbers, etc.)	4	9.3%
Provide information about the sources we used to write a research paper	8	18.6%
Be consistent with abbreviations, acronyms, and numbers	5	11.6%
All of the above	39	90.7%

Let's say you find a book with details about your research paper topic. You summarize the details in your own words and put it in your paper. Do you have to cite that information?



Yes	38	88.4%
No	2	4.7%
Maybe	5	11.6%

ENGL 1302 open-ended comments (APA)

- I have no idea, I learned once the professor did not teach it well so I need to learn again.
- idk what apa is. I hope it is almost as easy and mla.
- I do not understand why we have been learning MLA format for so many years and now you are switching it up with this crazy APA stuff. This displeases me greatly :(
- My major issue would be paraphrasing, and quoting...I understand why the quotes are necessary, I just apparently can't get it right.
- Not sure what APA is..
- What is the difference between MLA and APA
- APA is an interesting format, although it overwhelms me sometimes as far as citing sources. I often confuse it with MLA's standards.
- I do not know anything about APA format. Please make it easy to understand.
- I have never been taught by a human being about APA. I have only read about it in my Writers Reference book.

Now let's do an informal formative assessment

Are you ready to go on to the next topic?

Yes



No



FA during a one-shot to check understanding

- Use formative assessment to test students' grasp of concepts as you teach
 - ENGL 1301 one-shots on academic integrity and MLA
 - Tools like Kahoot! ([getkahoot.com](https://www.getkahoot.com)) combine audience-response system and gamification

STUDENT	the information if it is in your own	Do you include it in your paper?	Do you need to cite the source?
sharks	No	No	Yes
Owl	No	No	Yes
Timmy	No	No	Yes
josh	No	No	Yes
houstonsippers	No	No	Yes
btcj	No	No	Yes

STUDENT	the information if it is in your own	Do you include it in your paper?	Do you need to cite the source?
clump 1	No	No	Yes
Tacos	No	No	Yes
KAHOOOOOT!	No	No	Yes
It's Too Early	Yes	Yes	Yes
Corner Club	Maybe	No	Yes
SQUAAAAAD	No	Yes	Yes

Formative assessment at the end of a one-shot

SCOTUS Lesson on Voting Rights Act

Assignment required understanding of primary and secondary sources, as well as conservative and liberal legal opinions

SCOTUS lesson: Demonstration of learning

Sort 4 sources into the matrix:

Primary Source

Secondary Source

Liberal

Conservative

Discussion question: Socrative. com

Enter room code GBVJQTV8

Briefly describe any formative assessment technique or question you think could be used in class to improve your teaching or help students

Using FA to provide individualized instruction and feedback: Concept maps



Using FA to provide individualized instruction and feedback: Research survey

Describe your research topic in 1 or 2 sentences *

Your answer

List keywords you brainstormed about your topic *

List at least 5 keywords

Your answer

If you found a source in the Academic Search Complete database that you think will be helpful, copy and paste its APA citation here *

You can use the citation the database gives you, but be sure to correct any capitalization or punctuation errors you see!

Your answer

Why do you think this source will be helpful for your research paper? What made you choose it? *

Your answer

Using FA to provide individualized instruction and feedback: Research survey

- Requires instructor buy-in and time
- Email response to each student with detailed suggestions and feedback:
 - Topic selection and refinement
 - Keywords and search strategies
 - Recommended databases
 - Chosen article and citation
- Collecting data on student response rates and research paper averages

Individualized instruction and FA?

- Can FA be used to understand individual students and lead them to advanced levels of information literacy?
- Can FA go beyond performance/behavior and into metacognitive realm?
- Can FA be combined with online learning and/or badges to yield results?

Obstacles for librarians using FA to individualize IL instruction

- Infrequent and irregular student contact
- Insufficient prep time to use data and adjust instruction to groups and individuals
- Complex nature of IL and search

“Searching for information is often nonlinear and iterative, requiring the evaluation of a range of information sources and the mental flexibility to pursue alternate avenues as new understanding develops.”

(ACRL Framework for Information Literacy for Higher Education)

Formative assessment and advocacy

Conducting formative assessment and using data communicates:

- Putting student needs first
- Accountability for results (Data)
- Using best practices in instruction
- Alignment with goals of library and wider institution

Thank you!
Questions?

nskrasnoff@gmail.com

jdstimpson@gmail.com

goo.gl/j6wT0r