



Screenshare in Google+ Hangouts

Lisa = Tutor Perspective

Austin = Student Perspective

Google+ Hangouts

https://plus.google.com/hangouts/_/grpae7gn4txescdksiorvixcaa?hl=en

MasteringChemistry: Hom... x +

https://session.masteringchemistry.com/myct/ItemView?a: Search

CHMB402 Spring 2015 Signed in as Austin Gehret, Instructor Help Close

Homework 8 Cellular Respiration (3 of 5): Acetyl CoA Formation and the Citric Acid Cycle... Resources

Item Type: Tutorial Difficulty: -- Time: -- Contact the Publisher Manage this Item: Standard View

2 C
3 C
4 C
5 C
6 C
7 C

(from Glycolysis) isocitrate
alpha-ketoglutarate
citrate
Citric acid cycle
succinyl CoA
acetyl CoA
oxaloacetate
malate
fumarate
succinate

CO₂
a
b
c
d
e
f
g
h
i

reset help

Submit Hints My Answers Give Up Review Part

Incorrect; One attempt remaining; Try Again

You labeled 1 of 9 targets incorrectly. You have incorrectly identified the number of carbon atoms in the molecule in target (i). Notice that in the reaction that converts the molecule in target (h) to the molecule in target (i), no carbon atoms have been lost as CO₂. Also, note that the number of carbon atoms in target (b) is equal to the number in target (i) plus the number in target (a).

Group chat

To list all available commands enter '?'.
Enter chat message or link here

A

46

Tutor sees student's work but not student

Can communicate using:

- 1) Chat
- 2) Voice
- 3) Sign

Student still has tutor's video feed



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**Screenshare
is disabled
by the
student and
video feed is
restored**



Google+ Hangouts: Screenshare Summary

- Screenshare works very well with online homework, has potential to liaise with other platforms
- Student can often receive feedback from tutor quicker than in a face-to-face session



Part II: Document Management and Collaboration with Google Drive

- Google Drive simplifies and organizes document updating
 - Working from two different offices and at home
- Asynchronous tutoring through Google Drive
- Collaborate on documents with colleagues remotely



Google Drive Simplifies/Organizes Document Updating

Google+ My Drive - Google Drive

https://drive.google.com/a/dhhvac.org/?tab=Xo#my-drive

Apps RIT email Dining Services RIT Tiger Bucks Vendors

Drive

CREATE

My Drive

Shared with Me
Starred
Recent
Trash
More

Install Drive for your computer

TITLE	OWNER	LAST MODIFIED
Biochemistry II	me	Jan 14 me
Biochemistry Tutoring	me	1/29/14 me
Biotechnology II	me	8/29/14 me
FEAD proposal AY15-16	me	Jan 14 me
Ken's paper	me	Mar 3 me
Lecture Notes	me	6/30/14 me
Letters of recommendation	me	12/19/13 me
LRPE Committee Shared	Reynold Bailey	Jan 12 me
NSF AISL	me	10/24/14 Reynold Bailey
Old Exams	me	10/20/14 me
Papers	me	3/14/13 me
Position Listings	me	3/14/13 me
	me	9/3/14 me

11.53 GB used



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Asynchronous Tutoring Through Google Drive Document Sharing

The screenshot shows a Google Drive interface. At the top, the browser address bar displays the URL: <https://drive.google.com/a/dhhvac.org/?tab=Xo#folders/0B-OSIFkGxXzXUWQxMnl4Z1NiejQ>. The Drive interface includes a search bar, a '+A' button, a notification badge with '1', and a user profile picture. The folder name 'Tutorials Desig...' is highlighted with a red box. Below the folder name, three user avatars (labeled 'E', 'E', and 'J') are also highlighted with a red box. The document list is as follows:

TITLE	OWNER	LAST M...
Bioenergetics.pdf Shared	me	6/10/14 me
Energy Currency.pdf Shared	me	6/10/14 me
Henderson-Hasselbach Concept.pdf Shared	me	6/10/14 me
Making Acetate Buffer.pdf Shared	me	6/10/14 me
Membrane Transport Thermodynamics.jpeg Shared	me	6/10/14 me
Michaelis-Menten Enzyme Kinetics.pptx Shared	me	6/10/14 me
Michaelis-Menten Enzyme Kinetics.pptx Shared	me	12:19 pm me
pKa pH Concept.pdf Shared	me	6/10/14 me

Navigation on the left includes 'My Drive' and a folder tree with 'Biochemistry Tutoring' > 'Biochemistry I' > 'Tutorials Designed by Dr. Gehret'. The bottom left shows '11.53 GB used'.

Students have access to these materials outside of Google+ Hangouts

Currently used to provide tutoring support for summer classes



Part II: Document Management and Collaboration with Google Drive

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Document Collaboration in Google Drive using Google Docs

but also their development and comfort using sign language (XXXJ. Macdonald. Teacher, personal communication, 13 January, 2015XXX). This level of social engagement may seem typical for most students, but engagement with the D/HH students through technology holds great potential. For years, there has existed a “participation gap” for D/HH students at the post-secondary educational level (Jenkins, Clinton, Purushotma, Robison, & Weigel, 2006; Komesaroff, 2005). This is further reflected in the Science, Technology, Engineering and Mathematics (STEM) fields with the U.S. average graduation rate for D/HH students with bachelor’s degrees around 23% and between 1997 and 2006, only about 0.2% of new STEM PhDs were D/HH (Hoffer, Hess, Welch, & Williams, 2007). This has led to a discrepancy of hearing (17.9%) versus D/HH (15.5%) representation in the STEM workplace with hearing individuals obtaining jobs in higher-earning sectors of various STEM disciplines (Walter, 2010). Some contributing barriers that have led to these discrepancies likely occur early in D/HH students’ education. Among these include a lack of support for student preparation in basic STEM skills and concepts as well as a lack of a peer network for socialization, mentoring and academic support (Stinson, Scherer, & Walter, 1987).

The Deaf STEM Community Alliance was established in 2012 as a collaboration between the National Technical Institute for the Deaf (NTID) at Rochester Institute of Technology (RIT) (Rochester, NY), Camden County College (CCC) (Blackwood, NJ), and Cornell University (CU) (Ithaca, NY). It currently stands as the only funded alliance specifically targeted to a single disability and leverages the expertise of NTID support faculty and staff in the postsecondary education of D/HH students. Their experience is uniquely suited to identify and develop strategies to address these barriers D/HH students face in the pursuit of STEM careers (Foster, 2009; Walter, 2009) and is supported by the fact that the average graduation rate for D/HH students in STEM bachelor’s programs is 73%, about 50% higher than the national average (NTID, 2009).

The Deaf STEM Community Alliance is structured to enhance D/HH student academic preparation and socialization skills, two of the most significant barriers identified for these students in STEM fields of study at the postsecondary level (Foster, 2009; Walter, 2009). The Alliance identified Google+ as an ideal platform to serve in the creation of the D/HH Virtual

Collaborators can add comments

Comment Thread:

- A Gehret** 4:32 PM Jan 7: Jon, do you have any literature to support this?
- J. MacDonald** 11:17 AM Jan 13: Just had a chat with my teacher here at TSD, she feels that it is too early to have such information available in literature. However, this is absolutely true for the Deaf community through SnapChat, Glide, Facetime (<http://www.deafhh.net/wp/deaf-apps/>) Slide 5 and other slides if you feel they are necessary for this paper.
- A Gehret** 3:28 PM Jan 16: Jon and Lisa, how does referencing in this manner sound?
- J. MacDonald** 9:37 AM Jan 17: That's what I am thinking too. It's too early for that kind of information to be available in literature other than the link that I sent above. I agree with the referencing in this manner.
- L Elliot** 12:47 PM Jan 17: I think the protocol is to give names. For example: (X. Teacher, personal communication, 13 January, 2015)



Document Collaboration in Google Drive using Google Docs

Distance Chemistry Tutoring as provided by the DHHVAC 1

Collaborators can made direct edits/suggestions

Title: Distance Tutoring in Chemistry Through Google+ Hangouts: A Case Study by the Deaf STEM Community Alliance

Abstract

The current study was established to gauge the efficacy of providing remote tutoring to deaf and hard-of-hearing (D/HH) students using Google+ Hangouts. Remote tutoring sessions were offered to seven different students in support of three biochemistry and three general chemistry courses. Successful remote tutoring was qualitatively assessed through student willingness to engage and collaborate with the tutor using the Google Hangout tools. In addition to the video feed, the applications Chat and Screenshot were extensively used by students in the most interactive sessions. The ability of Screenshot to collaborate with third-party software gives Google+ Hangouts a dynamic ability to support countless courses utilizing an online component for class activities. Courses utilizing more traditional, passive learning environments can still be served by Google+ Hangouts by incorporating class materials through Google Drive that are shared in Hangouts, though these practices indubitably require more preparation by the tutor and student. Though Google+ Hangouts was initially identified for its video capabilities to support remote tutoring of deaf and hard-of-hearing (D/HH) students, the suite of features and applications available should prove amenable to serving any student population engaged in distance learning.

Introduction

In today's world, higher education is leveraging technology in increasingly innovative ways to

Comments

- A Gehret 10:23 PM Jan 6
Jon has requested the o justified.
- L Elliot 1:29 PM Jan 7
In APA style, yes, Jon's right. However, I actually believe this should be in the Header, Not the Footer (this shortened title is called the "Running Head")
- A Gehret 2:04 PM Jan 7
In reviewing the Author Guidelines for JSET, the manuscript should be submitted following all guidelines of the APA (6th ed., 2006). Do you have these on hand?
- L Elliot 2:05 PM Jan 7
Yes!!
- A Gehret 2:09 PM Jan 7
Do you also know if Jon is still available to review these changes?

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Discussion

Questions?

Answers!



Contact Information

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<http://www.dhhvac.org>

OR

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Thank you!