Happy Trails (HPTRL) – A Search for A&P Success
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JEFFERSON COLLEGE
9/26/14

Handout is available on Twitter!!!

@JC_DHOP
I’ll also post at www.jeffco.edu/DHOP
Objectives – Attendees will demonstrate an understanding of:

- a. the anticipated usage of technology to advance tutorial services in Anatomy and Physiology Education,
- b. the intended incorporation of gamification to increase total student content engagement time, and
- c. the potential usage of new Open Platform tools to advance intrusive advising within Anatomy and Physiology Education for Pre-Health Occupation Program Students.

My vision for this presentation – This is a modified case study!!!

- First part of a three part series

1. This presentation – The Overview
2. Next Year’s (Hopefully!?) presentation – The Implementation
3. A presentation in the future – The Outcomes
This is a two-way street.

Special Thanks to NN2 and Tammy Frankland, PhD!!!
Results by Question

1.) What percentage of students at my college are "first generation"? (Multiple Choice)

<table>
<thead>
<tr>
<th>Responses</th>
<th>Percent</th>
<th>Count</th>
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<tbody>
<tr>
<td>Less than 40%</td>
<td>9.52%</td>
<td>4</td>
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<tr>
<td>40-60%</td>
<td>40.48%</td>
<td>17</td>
</tr>
<tr>
<td>60-80%</td>
<td>35.71%</td>
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</tr>
<tr>
<td>More than 80%</td>
<td>9.52%</td>
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<tr>
<td>Don't know</td>
<td>4.76%</td>
<td>2</td>
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<td><strong>Totals</strong></td>
<td>100%</td>
<td>42</td>
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2.) What percentage of the students at my college are Pell Eligible? (Multiple Choice)

<table>
<thead>
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<th>Responses</th>
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<th>Count</th>
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<tr>
<td>Less than 40%</td>
<td>23.8%</td>
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<tr>
<td>40-60%</td>
<td>26.19%</td>
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<td>60-80%</td>
<td>33.33%</td>
<td>14</td>
</tr>
<tr>
<td>More than 80%</td>
<td>30.95%</td>
<td>13</td>
</tr>
<tr>
<td>Don't Know</td>
<td>7.14%</td>
<td>3</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>100%</td>
<td>42</td>
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</tbody>
</table>
Jefferson College

First Generation:

62%
(we believe closer to 80%)

Pell Eligible:

58%
National avg: 36%
(DOE, End of Year Report 2012-2013)

Why does this matter???

Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Graduation Rate</th>
</tr>
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<tbody>
<tr>
<td>JC 1st Gen Students Grad Rate (150%)</td>
<td>23.2% (2010 entry)</td>
</tr>
<tr>
<td>JC Pell Eligible Students Grad Rate (150%)</td>
<td>19.6% (2010 entry)</td>
</tr>
<tr>
<td>JC 1st Gen + Pell Eligible Grad Rate (150%)</td>
<td>19.9% (2010 entry)</td>
</tr>
<tr>
<td>JC Aggregate Grad Rate (150%)</td>
<td>32% (Complete College America)</td>
</tr>
<tr>
<td>MO Average Grad Rate (150%)</td>
<td>19% (ipeds)</td>
</tr>
</tbody>
</table>
Backstory @ JC

- New programs – Grant funding
- Terminal degrees vs. Transferability
- TAACCCT Round I

3. Anatomy and Physiology at my college requires which of the following??? (Multiple Choice)

<table>
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<tr>
<th>Responses</th>
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<th>Count</th>
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<td>No Pre-requisites</td>
<td>27.03%</td>
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<tr>
<td>Biology Only</td>
<td>32.43%</td>
<td>12</td>
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<tr>
<td>Chemistry Only</td>
<td>2.7%</td>
<td>1</td>
</tr>
<tr>
<td>Biology and Chemistry</td>
<td>13.21%</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>24.32%</td>
<td>9</td>
</tr>
<tr>
<td>Totals</td>
<td>100%</td>
<td>37</td>
</tr>
</tbody>
</table>
Pre-requisites at JC – A timeline issue

- No Bio/Chem (or greater than 5 years old)
- Year 1
  - Biology Semester 1
  - Chemistry Semester 2
- Year 2
  - Anatomy and Physiology 1
  - Anatomy and Physiology 2
- Year 3-4
  - Programmatic Course Work

- Bio or Chem
- Year 1
  - Bio or Chem
  - Anatomy and Physiology 1
- Year 2
  - Anatomy and Physiology 2
  - Other Pre-Req (or waiting)
- Year 3-4
  - Programmatic Course Work

- Bio and Chem
- Year 1
  - Anatomy and Physiology 1
  - Anatomy and Physiology 2
- Year 2-3
  - Programmatic Course Work

Balancing Act!!!

- Time to Completion
- Insurance of Competency
4.) What is the success rate (ABC) of AP1 first time takers at my college? (Multiple Choice)

<table>
<thead>
<tr>
<th>Responses</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 40%</td>
<td>34.09%</td>
<td>15</td>
</tr>
<tr>
<td>40-60%</td>
<td>38.84%</td>
<td>17</td>
</tr>
<tr>
<td>60-75%</td>
<td>13.64%</td>
<td>6</td>
</tr>
<tr>
<td>Greater than 75%</td>
<td>6.82%</td>
<td>3</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>6.82%</td>
<td>3</td>
</tr>
<tr>
<td>Totals</td>
<td>100%</td>
<td>44</td>
</tr>
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</table>

Jefferson College – AP1 Success Rate

First Time AP1 (ABC): **54%**

Re-Take Rate: **27%**

Non-Persistence Rate (DFW): **37%**

Friends at MCC state that 54-62% first time pass rate of AP1 over the past 3 years.
So I started thinking...

Jefferson College – Department of Health Occupation Programs

Pool of Students

API

HIT

OTA

PTA

RAD

RCP
Jefferson College – Division of Health Occupation Programs

Pool of Students

API

HIT  OTA  PTA  RAD  Nursing

Jefferson College – Division of Health Occupation Programs

Pool of Students

API

HIT  OTA  PTA  RAD  Nursing
Welcome to the Health Professions Tutoring and Resource Lab

Won't enter the course doorway!!!
HPTRL Outcomes

1. Increase the first-time ABC rate of AP1 for Health Professions to 75%.
2. Increase the re-take rate to 50%.
3. Decrease the non-persistence rate (DFW) to 18%.

How are we going to achieve these outcomes?

- Increase engagement by Advising from dedicated Health Profession Advisors.
- Increase engagement with content (quantity and quality).
- Increase engagement by using Open Educational Resources.
Logic Model:

Wasn’t sure which technique would work best...
so I got them all...
and a ball!!!

Intentional Advising

Intentional Advising with dedicated Health Profession Advisors.

OAAI

Intentional Advising
Developed by Russ Little and his team from Sinclair Community College.

- My Academic Map (MAP) helps students set appropriate goals and expectations.
- Robust set of tools to assist advisors, navigator, coaches, etc. to keep a student on track.
- Designed to improve retention, academic performance, persistence, graduation rates, and time to degree.
- We envision the tool assisting in our intra-campus communication.

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Early Warning System

- Jefferson College strives to not only incorporate the SSP, but to advance its utilization.
- Jefferson College has done some great work with attendance tracking.
- Jefferson College intends to incorporate the Open Academic Analytics Initiative to facilitate an early warning system.
  - Josh Baron and his team from Marist College
  - Next Generation Learning Challenges Grant Recipient
- SSP and OAAI are only tools. They are only as useful as the professionals wielding them!!!
Early Warning System

- SSP delivers an “On-track/Off-track” early warning system.
- OAAI will permit us to have a “Milestone” course EWS.
- If I want to be an engineer, I should be pretty good at math, right??
- If I want to be a PTA, I should be pretty good at A&P, right?
- These are only TOOLS... They are only as good as the processes that support them and the people that use them!!

OAAI

- Identified “at risk” students at 75-85% accuracy level within the first several weeks of the semester.
- Use of the OAAI system had a “...statistically significant impact on final course grades and content mastery (receiving a C or higher).”
- Utilized in research with two community colleges and two Historically Black Colleges and Universities (HBCUs).
- Entirely “…open-source technologies and predictive modeling…” keeps licensing costs at a minimum.
Round I TAACCCT Grant – What have we learned?

Average Age of MOHealthWINs Participants: **35**

Completion Rate (Cert or Degree): **56%**

Bottom Line: Intrusive (Intentional) Advising Works!!!

5. My college has embraced the concept of intrusive advising. (True / False)

<table>
<thead>
<tr>
<th>Responses</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>True (c)</td>
<td>54.05%</td>
<td>20</td>
</tr>
<tr>
<td>False</td>
<td>45.95%</td>
<td>17</td>
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<td>Totals</td>
<td>100%</td>
<td>37</td>
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</table>
Intentional (Intrusive) Advising vs. Traditional Advising

This is NOT a one size fits all model!!!
Increase Engagement – Gotta put the time in!!!

Increase engagement with content (quantity and quality).

- Anatomage Table
- Lindsay Human Anatomy Atlas
- Enhanced Tutorial Services
- Cohort Mindset
- Dedicated Space
- Gamification of Content

Anatomage Table

- An all-in-one, touch interactive life-size display
- 3D male and female content
- 3D High-Res regional anatomy
- 3D Viewing and modeling tools
- >100 clinical examples for clinical cases as well
- FYI – They have animals too!!!

www.anatomage.com
The Lindsay Atlas is described as the “next generation of interactive and easy-to-use software for teaching anatomy.”

- It is a “HTML5 Web Atlas and iOS App provide an integrated solution for instructors and students to build, view, edit, and share interactive human anatomy.”
- It will be used to build specimens for identification, language mastery, and integration of content within the tutoring lab.
Use what already exists and add to it!

Open Educational Resources.

Body of Knowledge

Open Educational Resources
Engage Students in Course Content

OER
COMMONS
OPEN EDUCATIONAL RESOURCES

GCF
LearnFree.org

MIT
Massachusetts Institute of Technology

Khan Academy
6.) I have a good understanding of the concept of “gamification”. (True / False)

<table>
<thead>
<tr>
<th>Responses</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>True (c)</td>
<td>52.5%</td>
<td>21</td>
</tr>
<tr>
<td>False</td>
<td>47.5%</td>
<td>19</td>
</tr>
<tr>
<td>Totals</td>
<td>100%</td>
<td>40</td>
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</table>

7.) My college uses “gamification” in our Health Occ Programs. (True / False)

<table>
<thead>
<tr>
<th>Responses</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>True (c)</td>
<td>35%</td>
<td>14</td>
</tr>
<tr>
<td>False</td>
<td>65%</td>
<td>26</td>
</tr>
<tr>
<td>Totals</td>
<td>100%</td>
<td>40</td>
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</table>
Gamification

AnatomyArcade.com

Gamification – Virtual and Actual Engagement

AnatomyArcade.com
End Result?

I ♥ ANATOMY & PHYSIOLOGY

&

DO

ANATOMY & PHYSIOLOGY
Key signposts for implementation

- September 30, 2014 – Notification of acceptance or rejection from DOL for Round IV TAACCCT.
- October 1, 2014 – Strategic Planning meeting with TaskForce.
- October 1, 2014 – Hiring of Intentional Advisor
- October 15, 2014 – Receipt of Anatomage Table (RAD classroom)
- January 1, 2015 – Commencement of construction
- January 1, 2015 – SSP and OAAI
- March 1, 2015 – Hiring of Professional Tutor
- June 1, 2015 – Trial run of HPTRL
- August 1, 2015 – Full implementation of HPTRL
- September 30, 2017 – Grant closure and movement to institutional funds.

Budgetary Considerations

- Space
  - Reconfiguration of existing classroom/laboratory space into lecture and resource lab space - $10,000
  - Furniture and Charging station - $10,000
- Equipment/Supplies
  - Software, Hardware, models, etc - $15,000
- Staffing
  - Full-time faculty - $50,000
- Contractual
  - Computer related services - $80,000
8. I feel that this initiative will be most beneficial to the HPTRL. (Multiple Choice)

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Gamification of content</td>
<td>6.98%</td>
<td>3</td>
</tr>
<tr>
<td>Utilization of OER</td>
<td>0%</td>
<td>0</td>
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<tr>
<td>Intensive advising</td>
<td>46.51%</td>
<td>20</td>
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<tr>
<td>Dedicated tutorial services</td>
<td>30.23%</td>
<td>13</td>
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<tr>
<td>Cohort model study groups</td>
<td>16.28%</td>
<td>7</td>
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<tr>
<td>Totals</td>
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<td>43</td>
</tr>
</tbody>
</table>

![Bar chart showing percentages and counts for each response option.]

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Thank you for your time and attention!!!

@JC_DHOP
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WWW.JEFFCO.EDU/DHOP