

An abstract graphic on the left side of the slide consists of several overlapping vertical and horizontal bars in red, green, yellow, blue, and cyan. The bars have rounded ends and are layered to create a sense of depth and intersection.

# Integrating by degrees

And using backwards design to help

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# There is a careful progression in creating integrated curriculum using backwards design

- ◆ Decide on a conceptual design first – as planning progresses you can always change or tweak the design, but you need a framework to begin
- ◆ After the design is chosen, create a vision of the learner within the conceptual design framework
- ◆ Using the filter criteria, decide on which content and processes to include
- ◆ Craft assessments that match content and fit into your vision of the learner
- ◆ Decide on methods of delivery
- ◆ Evaluate and revise



# The Major Benefits of Integrated Curricula

## Pros

- Helps remove redundancies
- Offers students opportunities to see more easily the interconnections between discreet pieces of knowledge, different disciplines and content
- Offers an avenue for deeper learning as students and faculty are provided with different perspectives
- At interdisciplinary levels, integrated designs can help students focus on the critical, evaluative, and creative aspects of learning
- Facilitates better understanding between academics and their different disciplines

# Major Criticisms and Barriers

- ✗ It greatly waters down the disciplinary focus and therefore compromises traditional content
- ✗ People without deep understanding of a discipline and advanced training cannot fully understand the finer points or nuances inherent in a discipline
- ✗ Departmental mindsets and administrators' inability to see beyond the narrow confines of dollars, credit limitations, and the student head count
- ✗ Connections are haphazard and poorly formed
- ✗ Weak or ill conceived partnerships have little or no basis for continued or supported work

# In the beginning



There are a number of designs that facilitate different levels of integration.

First ask yourself –

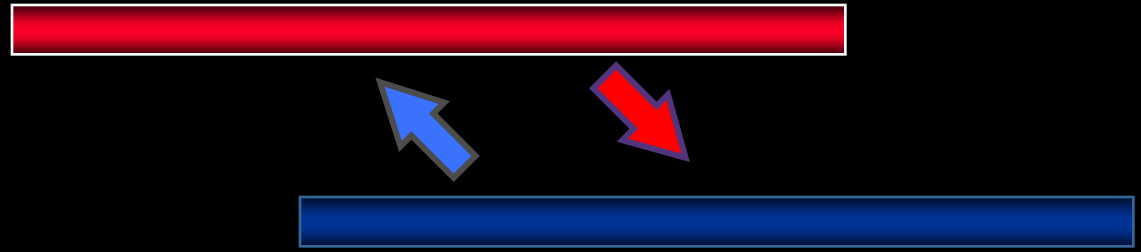
- Why do you want to do this?
- What do you hope to accomplish?
- Who will you be working with?
- What are the possible benefits to students?
- How does this instructional design fit into your end vision?

There is some confusion between the terms multidisciplinary and interdisciplinary or integrated

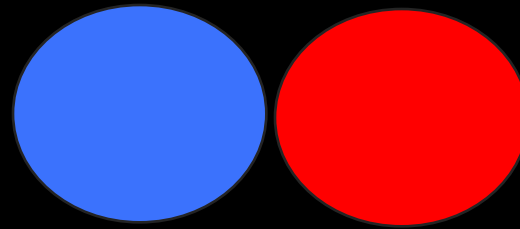
These are different concepts and go to the specific educational intentions.

- If the educational intention is for the disciplines to remain separate, even if there are similarities or shared elements, then the material is **multidisciplinary**.

- If there is an active intention for materials to be or become fused at some level, the material becomes **interdisciplinary**.



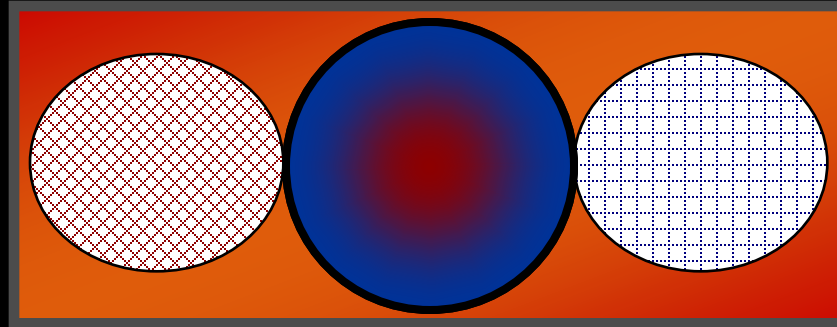
## Correlated Or Multidisciplinary



If there is no predetermined educational intention or attempt to actively fuse content or processes into one unified, seamless body. Knowledge remains separated and this design is simply *multidisciplinary*.



# Fused Or Integrated



However, if the borders between content, or processes become imperceptible, then material becomes actively fused or integrated. This process can take place gradually, by incremental degrees, until knowledge has no artificially prescribed boundaries or divisions.



# Multidisciplinary designs

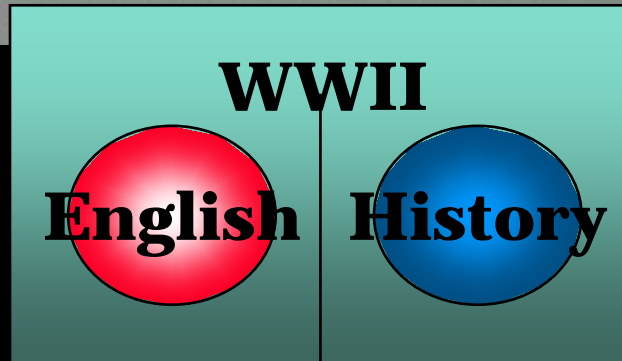


You can add meaning to separate subjects with different multidisciplinary designs.

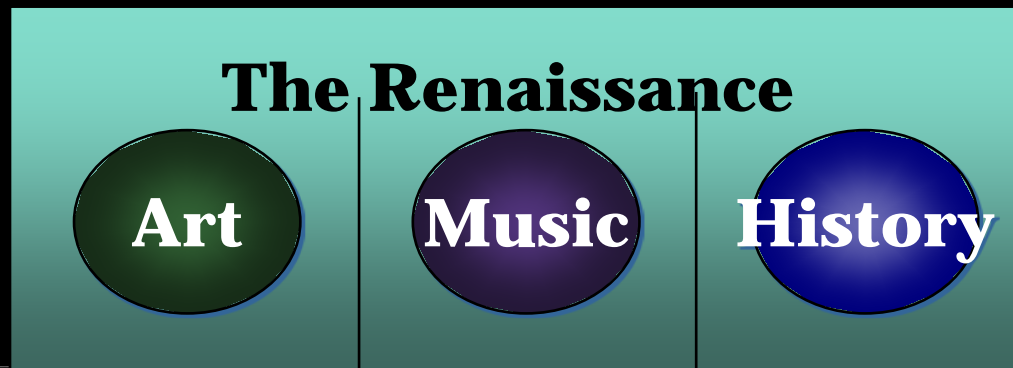
- Shared
- Thematic or webbed
- Threaded



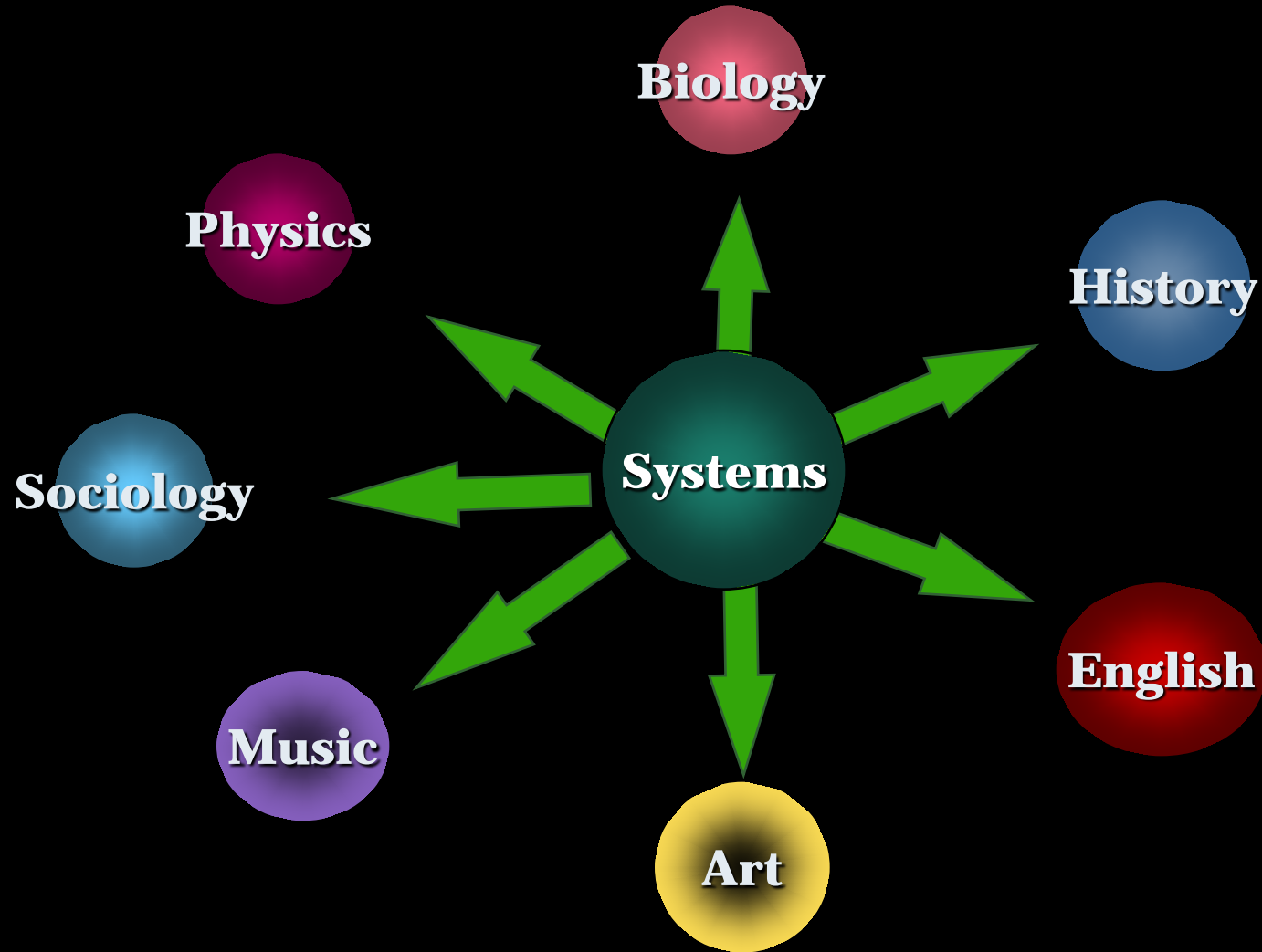
# Framed or Shared Designs



Correlated or shared - Different subjects share the same timeframe, theme, or are offered in a block of subjects, but remain separate. This design has the potential to add more meaning than courses offered separately as students may be able to see similarities and connections more easily for themselves.



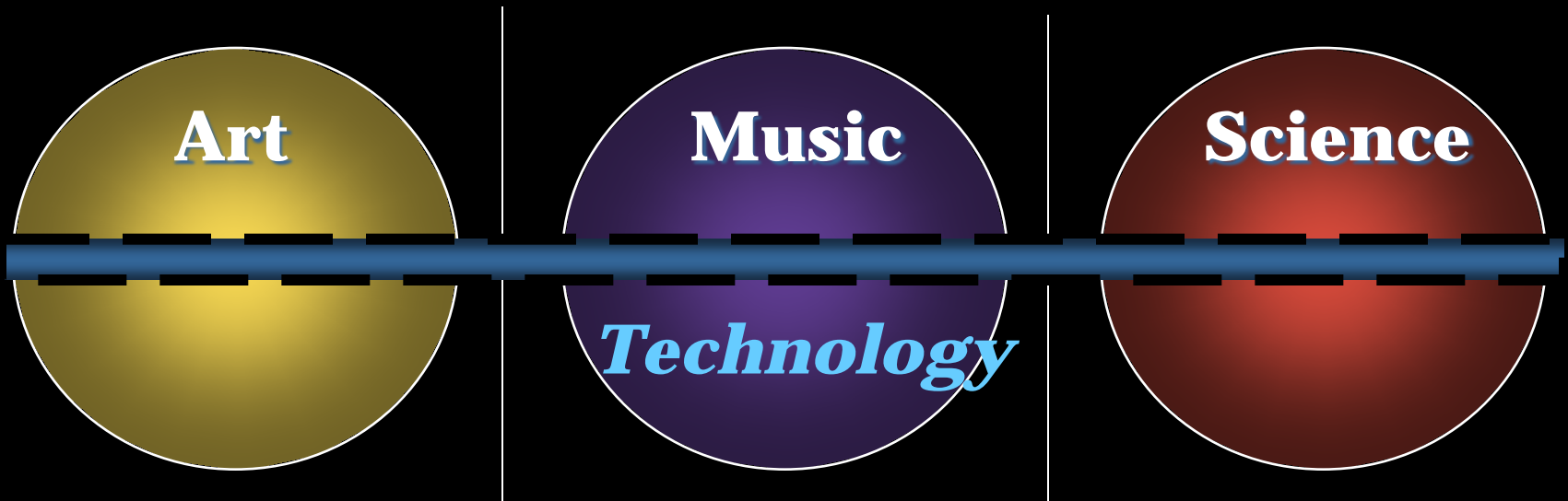
# Thematic or Webbed Multidisciplinary Design



Even though disciplines remain separate, students benefit from this approach because it leads to deeper understanding of the central theme or themes.

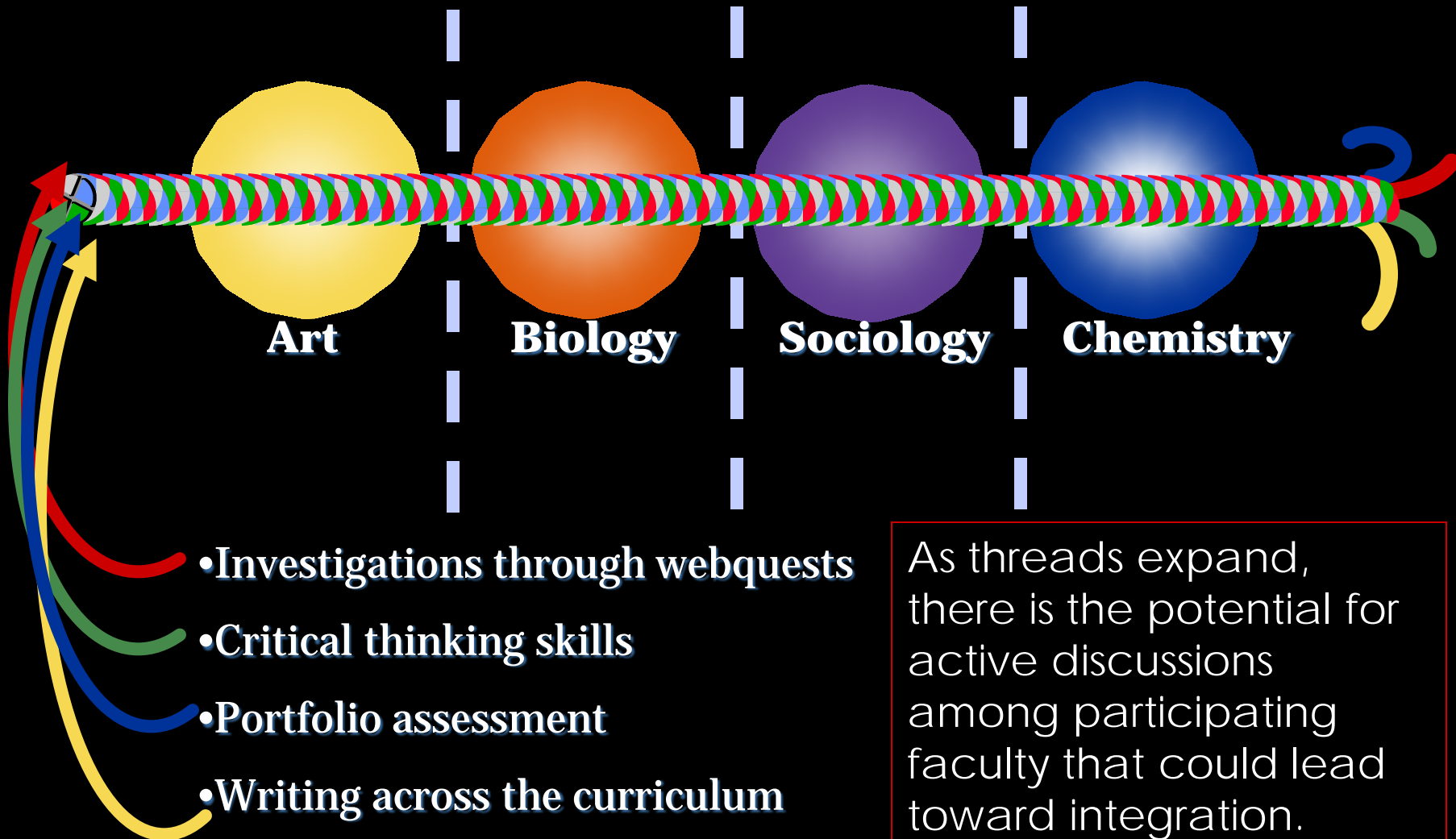
# Threaded Designs

A single thread is added to all disciplines



Proficiency in the chosen thread is emphasized and students are given the message that this process or skill is very important.

Threaded designs can be expanded so that there are multiple threads, however disciplines are still not actively fused



# On the road to fully fused designs



Remember, there has to be the purposeful intention for the design to fuse or integrate different disciplines, even for a brief period. Or, the intention for one subject to be viewed from the perspective of another discipline.

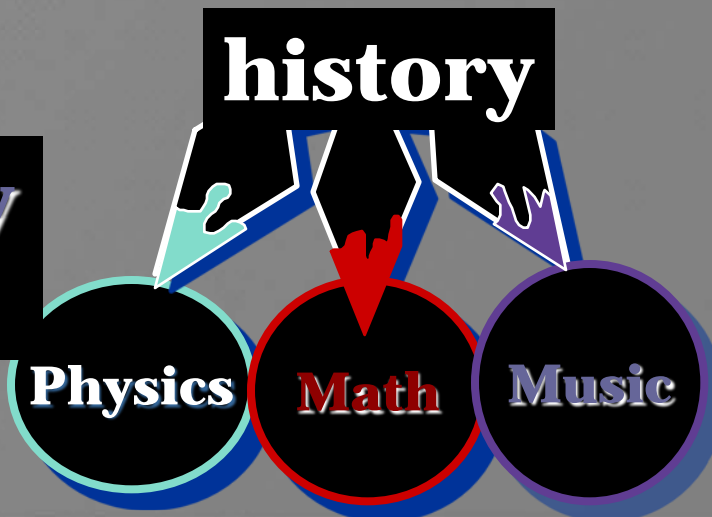


# Creating different views through information integration

In an information age, it will be necessary to actively integrate material in order to save time, eradicate redundancies, and to see where there are like concepts and ideas that overlap and connect. Students' intellectual lives are greatly enriched by having opportunities to view and study subjects from different perspectives. Cross disciplinary designs are integrated and can be achieved by one person in one course or discipline.



**history  
of...**



**Cross disciplinary design**

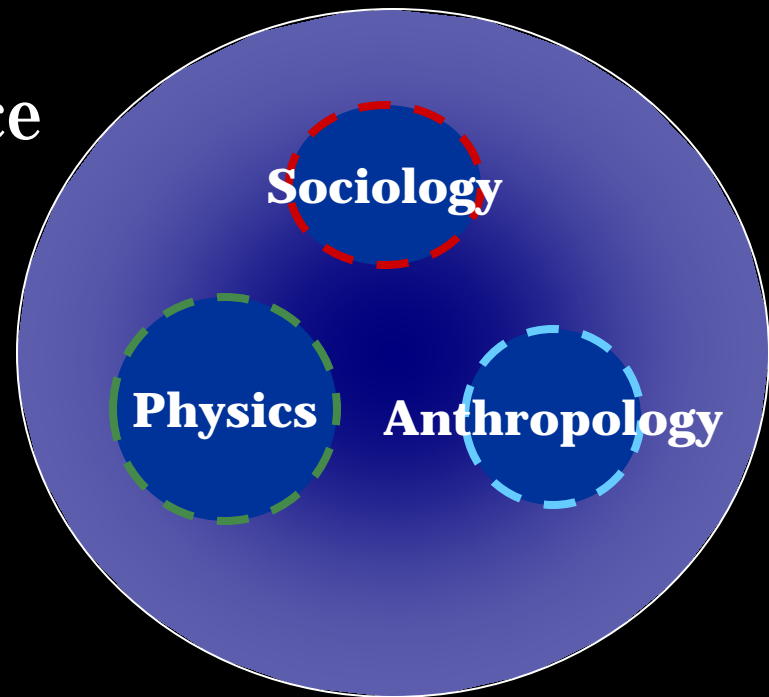


# Cross Disciplinary Designs

One can achieve infusion through periodically bringing in other disciplinary skills or perspectives.

## Dance

**Imbedded or Infused -**  
Aspects from other disciplines are actively imbedded to create an infusion and to promote deeper understanding of the course content.

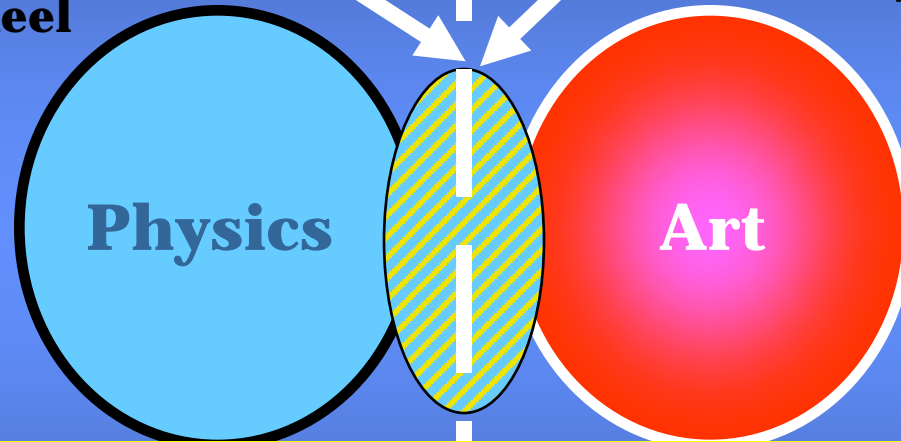


# On the road to fully fused designs

## Temporarily Fused Model

- Effects of centrifugal force on pottery shapes thrown on the wheel

- Different effects of heat on pottery



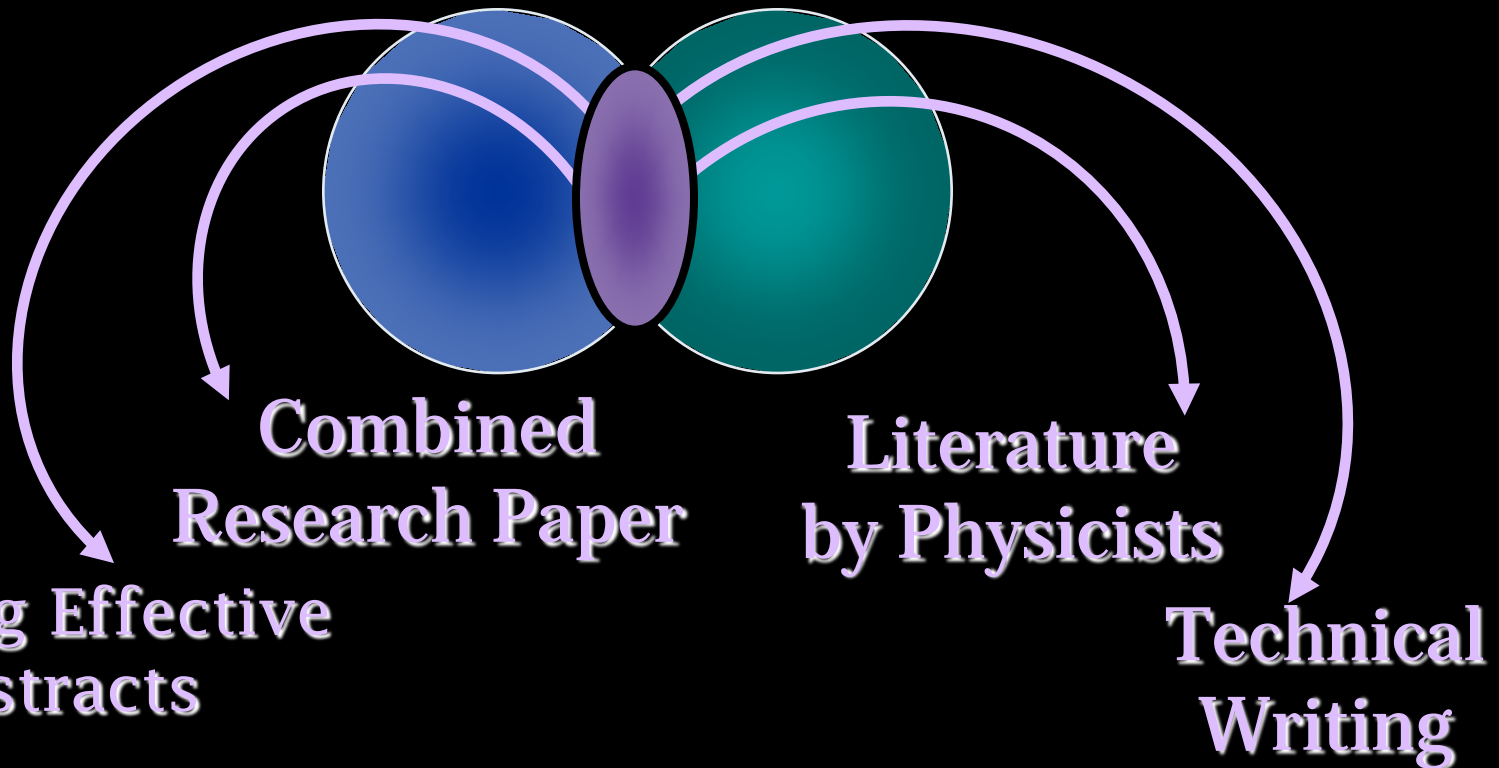
The fused intersection is a pottery unit

There is a brief exchange of ideas and mutually supported concepts, but generally time periods remain rigid, and material and processes remain specialized.

# Intersections - Two disciplines create fused shared components

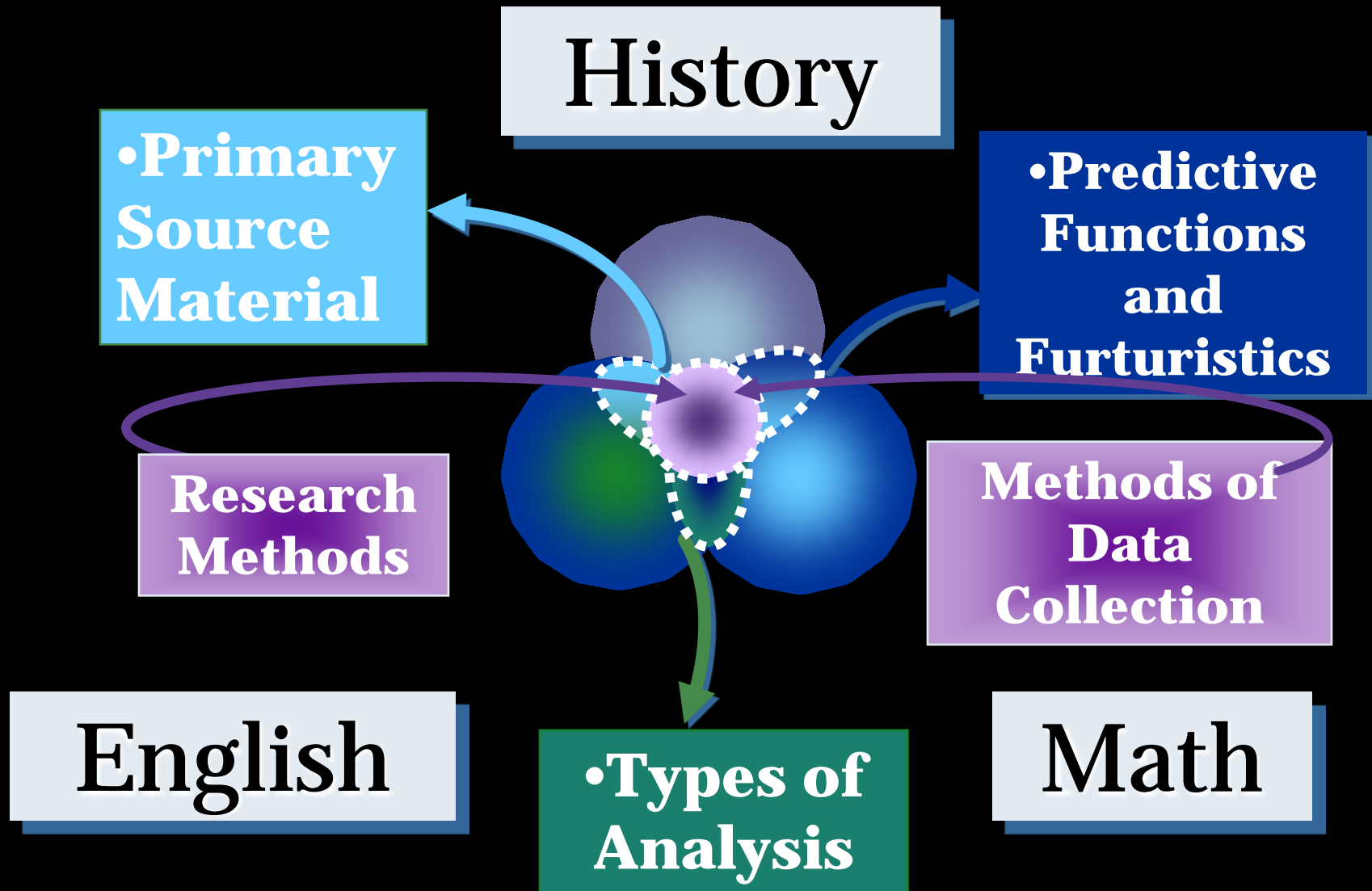
**English**

**Physics**

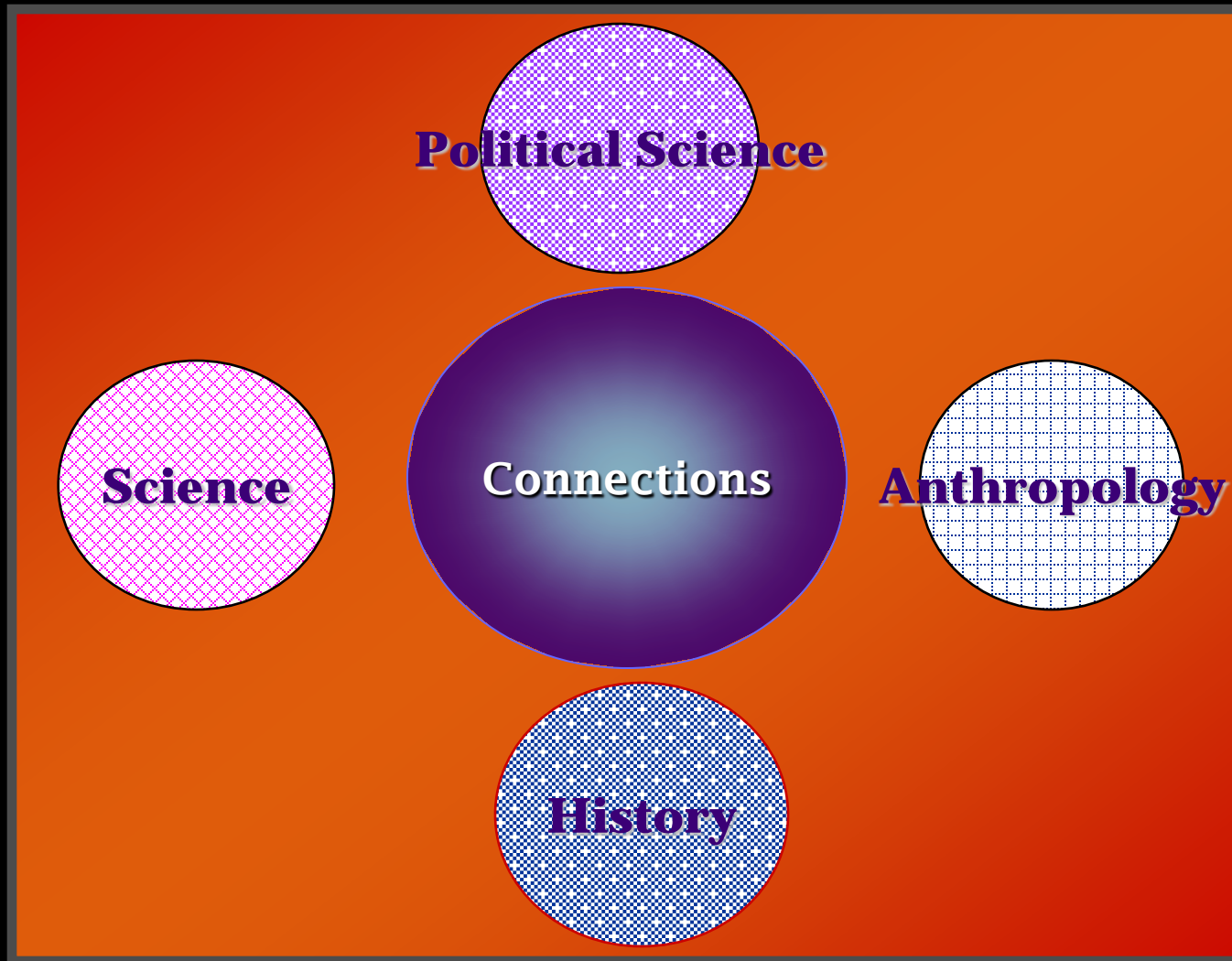


There is the active intention on the part of both instructors to make reference to students' experiences in the other's class, and texts and assignments may be shared or complimentary or aligned and cross referenced, or the same assignment given a grade in each class.

Disciplinary lines begin to blur as multiple subjects are fused

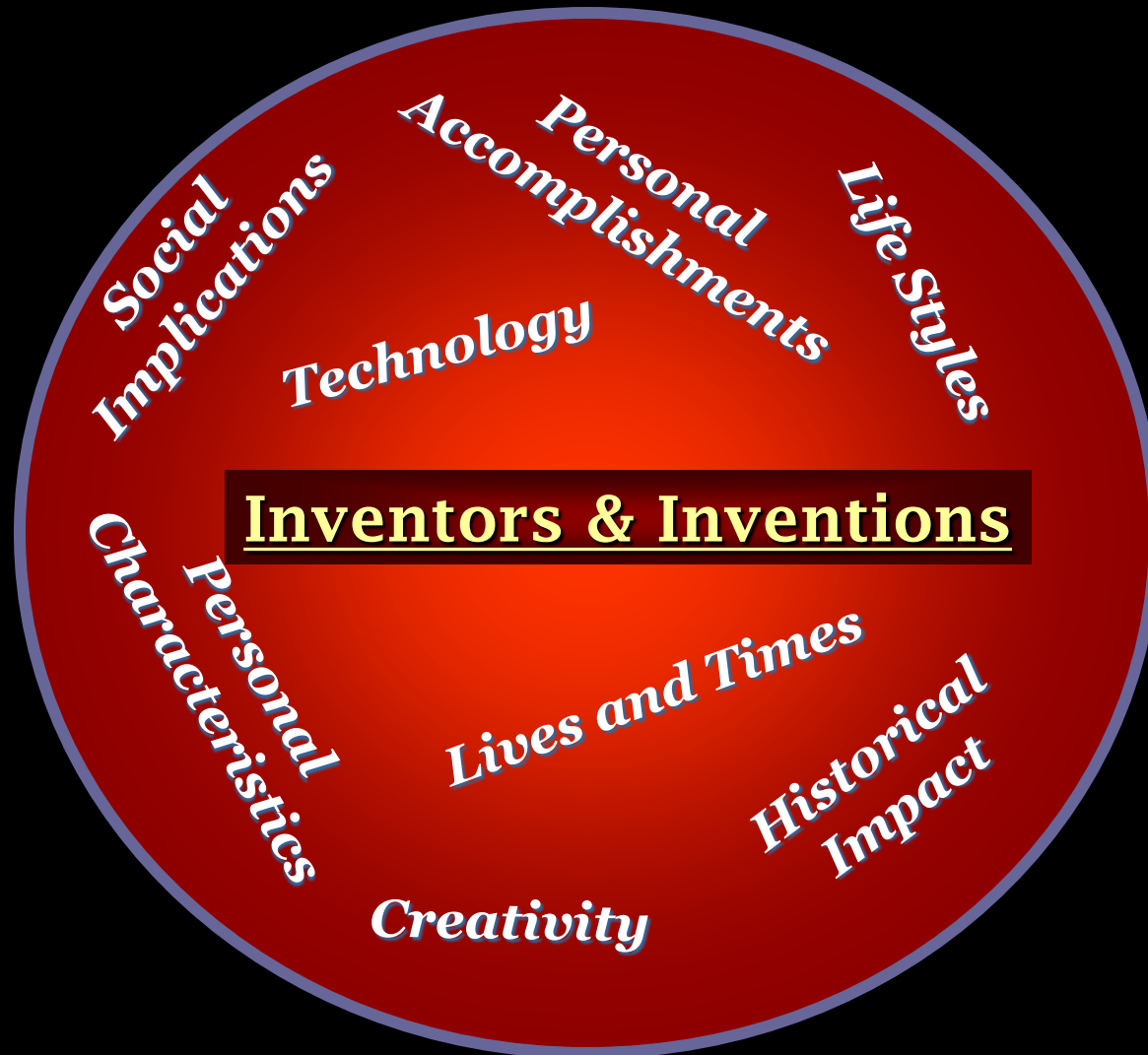


# On the road to fully fused designs

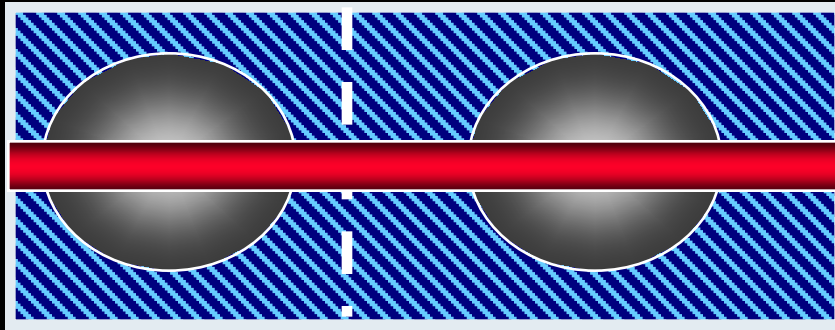


James Burke's *Connections* Series is a good example of seamless integration

Transdisciplinary or Fully Fused Designs  
Lines between disciplines have become  
indistinguishable

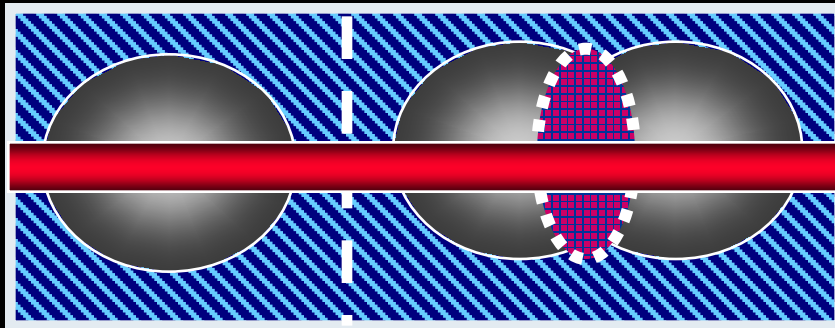


A.



**Multidisciplinary**  
Framed and  
Threaded

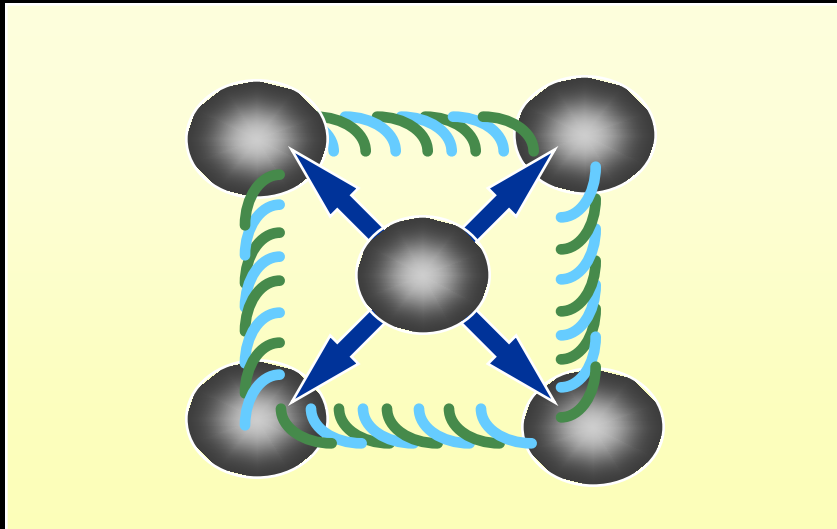
B.



**Multidisciplinary and  
Fused**

Framed - Threaded -  
Integrated

C.



**Multidisciplinary**  
Thematic - Threaded



# On the road toward integration

Things which may facilitate integration: It is absolutely important to build and develop --

- rapport
- well-defined areas of intersection or common interests for possible integration
- clear performance parameters and negotiated expectations
- understanding and respect for one another's knowledge and disciplinary expertise
- clear and concise language free of disciplinary jargon
- visual schema that will allow you to better share your ideas with peers and with students and administrators
- agreed on methods of student evaluation
- administrative support for efforts, to include time to explore commonalities, develop courses, plus help in resolving administrative or political barriers

