



A Station Based Approach to Flipped Learning: Materials + Lesson Plans

Ridwan Whitehead & Tan Gedik



The Road Map

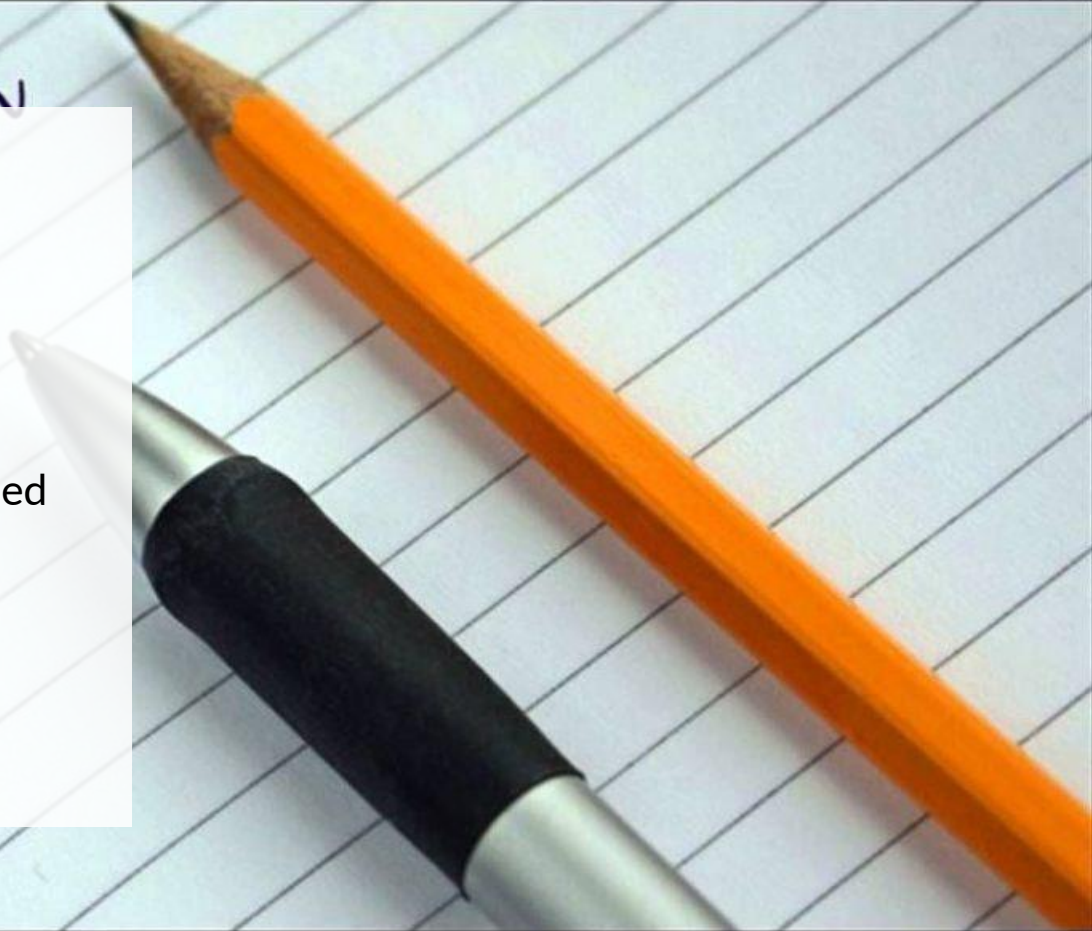
- 1) Introduction
- 2) Stations: Materials + Lesson Plans
- 3) Web 2.0 Based Materials
- 4) First hand experience!



Introduction

→ Stations have been utilized in various forms before however ****NOT**** in a flipped classroom environment.

→ This project is one of a kind in Turkey



What is



A **flipped classroom** is an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside of the classroom. It moves activities, including those that may have traditionally been considered homework, into the classroom.



Station Method/Approach

→ What is the station method?

The **Station Approach** is a **method** of instruction in which small groups of students move through a series of learning centers, or stations, allowing teachers with limited resources to differentiate instruction by incorporating students' needs, interests, and learning styles.

→What are the benefits?

Increase in student engagement, motivation, autonomy, productivity, group work and more teacher-student interaction.



Station Teaching

Speaking of Motivation...

(examples of student feedback)

station 4

writing a postcard

playing games

a station

I like everything in general.

Station 4th part 2

playin games

nothing

stations

Writing a report.

Reading reports

station 4

station 3

pair work activity (Station 4)

nothing

Station 4

playing kahoot

4th station

Station

Station 4.

STATIONS

stations

every stations

I learn the second use of would prefer.

stations

The stations

Station 4 exercise and station 2 exercise

To make things which is we made in english lessons

to learn wuld prefer and would rather

The 4th station.

Station

Everything.

IT WAS STATIONS



**In-class screenshots of one-on-one
interaction**

In-class screenshots of group management



Stations Cont.: Lesson Plans

→ What lies in its core structure?

Introducing... Bloom's Taxonomy aka over the counter medicine for anything.

→ How hard was it to fuse the two approaches?

Took some brain power but we managed it...

→ Our precautions and approach to it...

(i) Station 1 is our first-aid kit; (ii) Autonomy takes time and diminishes when faced with *difficult* stations; (iii) PPP+Discovery Learning; (iv) We don't let the students rotate among stations (progressive)

Obstacles

- The physical environment at our disposal
- Time constraints
- Student accountability
- Being unfamiliar with the topic
- Doesn't feel much like teaching - too unconventional?





Stations Cont.: Materials

→ **Materials... any difference compared to a conventional lesson plan?**

Not much... We follow the same procedures...

→ **Authentic/Theme-based materials**

Stations revolve around a theme... (e.g. Lithuania/Poems/Transhumanism)

Authenticity: Not always ideal. Either self-made (e.g. videos, poems) or adapted materials found on corpus databases.



Stations Cont.: Excerpts

Transhumanism is the idea that the capability of the human species can be improved using technology. It is the idea that by adding non-biological components to a biological system, the human body, future societies will be getting greater results in human ability and potential. Transhumanism can take many forms. Most commonly, a physical technology is embedded into the human body to enhance one of the five senses, offer information for cognitive use, or in some way assist the natural human body in its vital work. One excellent example is the use of implants to improve hearing. In individuals with impaired hearing, these implants will be bringing hearing back to a more regular level. In an average human, an implant could improve hearing beyond the "average" range. Other examples of transhumanist technologies include things like cryonics, gene therapy and virtual reality tools. These tools will be helping us to enable different kinds of brain development and exploration. However, for most certainly, a human being will not be living the same way in the next 50 years. But, will we all be living under the same conditions?

Questions

1. Identify and highlight the sentences with a marker that have future continuous tense.
2. What is the author's main aim here?

3. Do you think all human beings will be living in the same conditions? Why?

4. Give two examples for Transhumanist enhancements¹.

Too Many Koalas (TEXT 3)

In recent years, in Australia's south west state of Victoria, koalas have increased in number. This means, the animals have eaten *themselves out of house and home* by destroying trees.

Their bingeing and growing number eventually caused them to starve.

Scientists have moved 500 koalas over the past year, and their goal now is to control them and keep their numbers down. Recently, they have given the females and the males medicine so that they do not want to have babies and then have released them into other forests.

However, it will be some years before the trees grow back.

Difficult words: *eat oneself out of house* (metaphor: koalas eat too many leaves which are their homes), *binge* (eat too much), *increase* (rise in number), *release* (set free), *starve* (death from not eating for too long)



Disturbing yet intriguing
If your dreams were
Different you'd
Stuck in alternate realities...
Would you still be you?

1~ *vorhersagbar* (predictable)

Intriguing: interesting

Disturbing: annoying, or something that makes you feel uncomfortable

Alternate: alternative

So you might ask

Who victimized you?

I victimized myself

The moment I let everyone have me

Under their siege,

I victimized myself.

Oh if you were still fat and chunky

Like in this picture of yours

From old times

I would never be friends with you

2~ *rejoice, you have given birth to an eating disorder*

Victimized: treating someone very badly

Siege: capturing a place or someone (e.g. the castle was under the siege of the Ottomans)

Chunky: a person who has extra weight

Rejoice: congratulations

If my life were a movie

I'd hastily pack my bags

And drive off into the abyss.

But this isn't a movie...

3~ *you're a captive*

Hastily: hurriedly, fast

Abyss: a bottomless hole

Captive: prisoner

QUESTIONS TO ANSWER!

1) What is the general theme in these poems?	
2) Who is the writer of the poems talking to in these poems?	1) 2) 3)
3) You see the titles below the poems. Do you like them? Why?	1) 2) 3)
4) Please suggest other titles for each poem!	1) 2) 3)

Web 2.0 Based Materials

What is Web 2.0?

What used to be static HTML pages are now more interactive and dynamic. This web experience is called Web 2.0

→ How did we utilize it?

Controlled practice activities! H5P was our best friend... till Ryan messaged us...





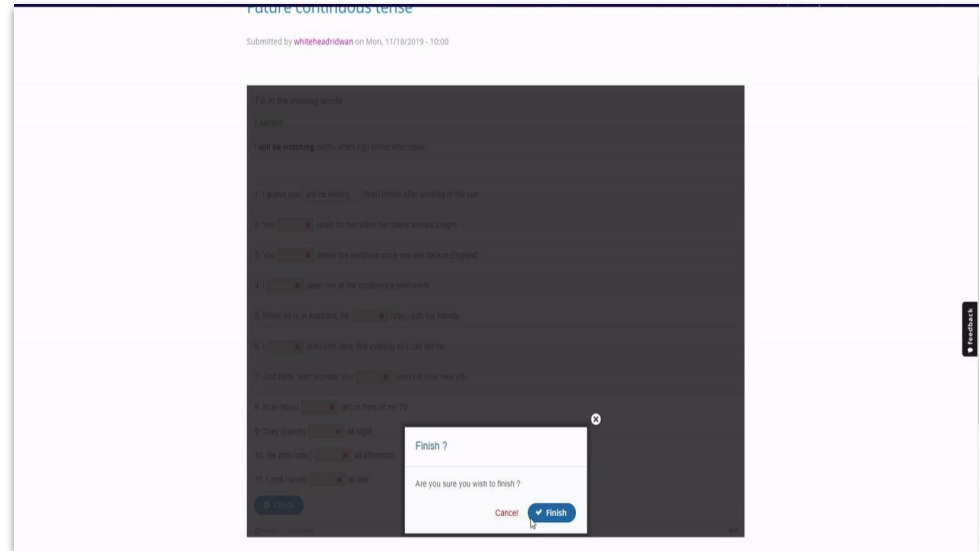
Video example

→ Pros-Cons?

- +Easily checked, improves student autonomy
- Fussy software, limited/requires subscriptions

→ What about motivation?

There is ****NOT**** a statistically drastic difference in terms of student motivation. However, it does result in a competitive atmosphere, and some students like this while some don't.



Achievements

- Autonomy
- Engagement
- One-on-one interaction
- Motivation
- Productivity



Let's go over all of it with a sped-up full length lesson!





COGNITIVE ASPECT OF DIGITAL LEARNING

RIDWAN WHITEHEAD

ARTICLES MENTIONED (IN CASE YOU WANT TO REFER TO THEM)

Cognitive Constructivist Theory
of Multimedia: Designing
Teacher-Made Interactive
Digital (Bull, 2013)

Digital Game-Based Learning
Supports Student Motivation,
Cognitive Success, and
Performance Outcome (Woo,
2014)

01

Traditional teaching methods are incompatible with today's generation

02

Digital materials are not effective enough due to being undisciplined (limited theoretical background)

03

How digital materials affect cognition is unknown for most teachers

PROBLEM

THEORETICAL FRAMEWORK & TERMS

Mayer's (2002) principles of multimedia design

- Multimedia/Multiple Representation
- Contiguity Principle
- Split-Attention principle
- Individual Differences
- Coherence Principle
- Redundancy effect

Cognitive Load

COGNITIVE LOAD

Cognitive Load refers to the capacity our brain has while processing information.



Intrinsic Load: If the load is imposed by the nature of what is to be learned, including the number of information elements and their interactivity, it is known as **intrinsic cognitive load**.

Extrinsic Load: However, if the load is generated by the manner in which information is presented to learners, it is under the control of those who design learning experiences. Known as **extraneous cognitive load**, it is imposed by mental activities that can have a negative effect on learning if not designed appropriately. Extraneous load can interfere with the construction or automation of schemas.

MAYER'S (2002) PRINCIPLES OF MULTIMEDIA DESIGN

- Multimedia/Multiple Representation □ The necessity of having more than two representation modes (video, audio etc.)
- Contiguity Principle □ The increase in effectiveness when both pictures and texts are combined
- Split-Attention principle □ two different systems; verbal and visual. Both should be addressed in a balanced way
- Individual Differences □ Designed in a way that materials can be mapped.
- Coherence Principle □ Materials being on the same level of the learners to avoid confusion and overloading
- Redundancy effect □ Do not have more than one item in the materials that address the same system, otherwise, they'll compete.



Utilizing these principles result in an increase in:

- motivation
- learning effectiveness
- addressment of various learning styles
- concept comprehension

RESULTS

Is that all?

→ NO! It is up to your imagination how crazy you want to go with Flipped Teaching + Stations.

→ Always remember! Stations are an option, **not** a must!

→ Here's another example of a possible flipped classroom at METU.



Syntax <3 Trees

→ A video prepared by the teacher/found on the internet! Alternatively, assigned readings would also do (Remembering+Understanding/ST1) ((This part can be extended based on your students))

→ https://www.cs.bham.ac.uk/~pxc/nlp/InteractiveNLP/NLP_syn1.html OR alternatively use *The Trees 3* (Applying/ST2)

→ Give students trees diagrams, some of which contain errors, ask them to find the errors and correct them (Analyzing/ST3)

→ Creating! Each student gets to draw syntactic trees based on the given sentences (Creating/ST4)

→ Evaluating! Students get to evaluate each others trees and their learning.

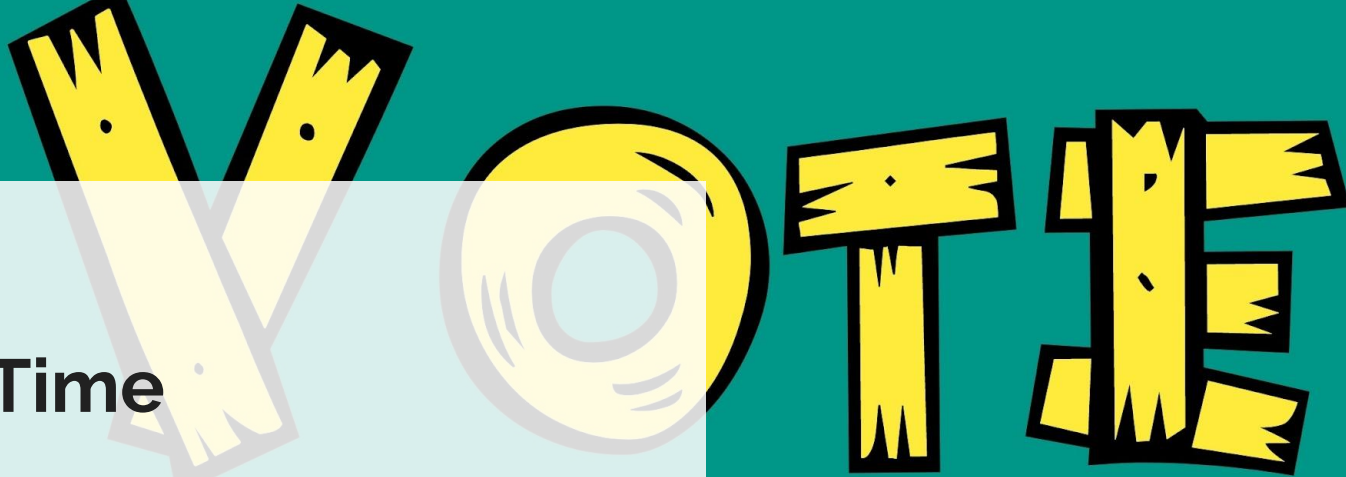
Q&A TIME

→ Would you use this in your own classroom? If so, how often would you use this?

→ Practical?

→ Your questions?





Poll Time

→ Form groups!

→ Go to PollEv.com/flippedmisst957 on
your devices



First hand experience!

- There is an example lesson plan we have prepared in the drive folder. Let's go over it together!
- Form groups
- Go to your respective group and start working on the task
- Let's share and discuss our flipped lesson plans



Feedback form

We need some feedback.

Alternatively→ <http://bit.ly/flippedfeedback>

