



# Technology Institute for Music Educators

## Integrating Technology into the Music Curriculum

### (TI:ME 2C)

This course is required for TI:ME Level Two certification

For more information on TI:ME Level One and Level Two certifications, please visit the TI:ME web page (<http://ti-me.org>)

#### **Syllabus, Instructor Guide, and Instructor Appendices**

*(Complete Instructor Documents: 2C-Syllabus.PDF, 2C-I-Guide.PDF, 2C I-Appendices.PDF)*

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# TI:ME 2C Instructor Guide

## **Course Objective:**

This course will provide a context in which students will create relevant lesson plans and assessment criteria within each of the six areas of technology competency as defined by TI:ME in the text, *Technology Strategies for Music Education*. Pre-requisite knowledge for this course includes that gleaned from the TI:ME 1A and 2B courses (or equivalents). Each of the lesson plans developed as part of this course should be appropriate for use in each participants' classes or music related curricula. All of the lesson plans should show the students' competence with regard to integrating corresponding National, State, and Local standards.

## **Course Preparation:**

Instructors should make available all of the student information materials to the participants prior to the start of class. If the students have not already purchased TI:ME's *Strategies for Music Education* book for one of their previous courses, they should acquire it for this course.

An optional web-component (WC) is suggested for use with this class to provide additional learning opportunities for the students. Whether or not the WC is implemented, an instructor-based website should be considered for containing the related materials of this course. A complete detail of the WC, including an instructor's sample Website URL and log in information, may be in *Instructor Appendix D* of the *TI:ME 2C Instructor Appendices*.

## **Course Framework and Requirements:**

### **Review:**

Instructors should spend some time reviewing each of the TI:ME technology competency areas and the TI:ME 1A and 1B courses. The *TI:ME 2C Student Workbook* provides suggested review topics, a sample work-document, and optional activities for

each of the TI:ME technology areas. Instructors may opt to provide the review first or have the students complete the work-documents first. Instructors should fill-in whatever knowledge gaps are present in the students as they have time, but should also realize that the TI:ME 2C course is NOT about learning the related technologies; rather, it is about applying and integrating what has been previously learned in the form of appropriate lesson plans and curriculum development.

### **Optional activities:**

Depending on the needs of a particular class or the timelines of a course, the instructor may want to include additional activities for each technology competency area. A number of optional activities are suggested in each of the sections of the student workbook. Remember not to spend too much time on the optional activities and with the review process, the focus of this course is about the application of content already learned through the creation of technology enhanced lesson plans.

### **Lesson Plans:**

This course is designed to be modular in approach and is very flexible with regard to instructor implementation. Regardless of what approach is used, all students should cover each of TI:ME's six technology competency areas in the development of their lesson plans.

Because lesson plans can touch upon multiple TI:ME technology competency areas, it is possible to cover the six competency areas with fewer than six discrete lesson plans. Because of this, even though any given lesson plan may feature more the one competency area, the focus of any particular lesson plan should reflect the topic that is currently being taught or referenced by the instructor. If, for any reason, it is not possible to complete six discrete lesson plans, instructors should strive to cover all of the TI:ME technology areas in the totality of the lesson plans created by the students.

Hundreds of lesson plans are available for perusal at the TI:ME website. This site and lesson plans may be accessed by:

1. Opening the URL: <http://ti-me.org/>
2. Entering the log in information – User: members ~ Password: (current password)
3. Opening the URL: <http://ti-me.org/index.php/lesson-plans>
4. Sort and view a lesson by selecting an appropriate TI:ME technology area or national music standard

Instructors may want each student to give a brief constructive criticism about their peers' lesson plans. This is particularly easy to do if they are using the WC by having them make a brief statement in the comment section on each other's lesson plan pages.

Students should be encouraged to include rubrics as part of their assessment for each lesson plan. To this end, there are a number of online rubric generators that are particularly simple to use and allow the generated content to be embedded easily. Free websites such as Rubistar (<http://rubistar.4teachers.org>) allow for the easy integration of the produced product into the WC.

### **Final Presentation:**

At the end of the course, each student should present at least one of their lesson plans to their classmates. Depending upon class size, it may be necessary to have the students present their lessons to smaller class groups. Each of the students should receive peer feedback about their lesson presentation (this may be accomplished orally through discussion, traditionally via paper/e-mail, or as part of the WC).

### **Course Wrap-up:**

Students are strongly encouraged to enter their lessons into the TI:ME database as part of this course. These lessons will be edited for content and later posted as part of the lesson plan repository available to TI:ME members for later use. Students should also share the lesson plans that they have made during this course available with their classmates. If the WC component is being utilized, they will already have access to each other's lesson plans. Consider having the students create PDFs of their lesson plans as well.

TI:MEs lesson webpage URL:

<http://ti-me.org/index.php/lesson-plans>

### **Optional Web Component (WC):**

The nature of this course lends itself well to being integrated and developed within an online community environment. Because of this, an optional Web Component (WC) has been developed for use with this course.

There are many different types of software that may be used to accomplish the goal of the WC. WordPress (<http://wordpress.com>) has been chosen as the model to be used with the TI:ME 2C instruction materials for demonstration purposes. WordPress

software is completely open-source, well-supported, has millions of users, and provides optional privacy components. A brief list of alternate options for use as the WC component software include:

- Blogger – <http://blogger.com>
- Edublogs – <http://edublogs.com>
- Grou.ps – <http://grou.ps>
- Ning – <http://ning.com>
- Tumblr – <http://tumblr.com>
- Typepad – <http://typepad.com>
- Wikispaces – <http://wikispaces.com>

### **What is the Web Component?**

In essence, the WC consists of an instructor website and multiple student websites. Because a Web 2.0 site engine such as WordPress is being utilized, built-in teacher/peer collaboration functions exist that can facilitate communication and dialog options for all of those in the course. In addition, using the WC provides an excellent learning opportunity for the students to build-upon for future online endeavors with their own students, peers, and the public. The WC may be used with either distance learning courses or in conjunction with a traditional classroom setting.

### **Basic considerations for use with WordPress and the WC:**

WordPress sites can be obtained for free by visiting and signing up for them at <http://wordpress.com>, or the direct sign-up URL: <https://en.wordpress.com/signup> (*Instructor Appendix A*)

A standard naming convention is recommended for all of the WordPress sites that will be used as part of the WC. A typical instructor's WordPress URL address might use the following convention (*Instructor Appendix B*):

**[year][course number].wordpress.com - <http://2011mt530.wordpress.com>**

When the students create their websites, they can then use a similar URL naming convention for ease of remembering and continuity:

**[year][course number][first name].wordpress.com – <http://2011mt530joe.wordpress.com>**

Privacy options available in WordPress may be used to ensure that the content generated for the course remains available to only those taking the course. If TI:ME

course specific materials are to be posted, the site should utilize privacy mechanisms to prevent the content from being viewed outside of the course environment. WordPress offers three basic privacy options for the entirety of the site (individual pages may be further protected see Instructor Appendix C):

*Option 1 - “I would like my site to be visible to everyone, including search engines (like Google, Bing, Technorati) and archivers” ~ this option allows anyone to view the site and also allows the site to be indexed by various search engines*

*Option 2 - “I would like to block search engines, but allow normal visitors” ~ this option will make it harder to find the site (as it will not be listed in legitimate search engine results), but anyone may view it if they have access to the URL*

*Option 3 - “I would like my site to be private, visible only to users I choose” ~ this option will make the site completely private and allow up to 35 different users access*

To facilitate the class and start it quickly, an instructor might make their site private and set it up so that only the students have access to it. As the students create their sites, they might choose privacy option two for the duration of the class and then choose to have it indexed, made completely private, or delete it at the end of the course.

### **Content example of the instructor’s WC site:**

Working WordPress example site: <http://time2c.wordpress.com>

User name: 2ctimeinstruct Password: 1timeinstruct2

*Please don’t change any settings...*

A minimum suggested framework of the instructor’s site contains the following elements (*Instructor Appendix D* and Demonstration website URL):

1. Welcome page  
~This page could contain information and links pertinent to the course and serve as a “landing-page” that each student will view when arriving at the instructor’s site.
2. “About me” page  
~This page could contain information about the instructor
3. “About you” page  
~This page could contain answers to multiple questions for the students to answer about themselves prior to the onset of the class through the built-in comment section of the page

4. Checklist/Lesson Plan page  
~This page could contain a checklist of items to be completed for each lesson plan assignment and other aspects of the course
5. Course Description/Syllabus Page  
~This page could contain the specific course information and the entirety of the syllabus
6. Classmates Page  
~This page could contain the links to all of the enrolled students' course websites for quick reference
7. Requirements page  
~This page could contain information about course specific requirements some of which may be required prior to the starting of the course
8. Resources page  
~This page could contain any information related to the course and related URLs and online resources and could also serve as an online repository of useful sites and information found during the course of the class

**A Selection of Optional WC Pages for consideration:**

1. CAI Q&A page  
~This page could contain information about music-related CAI programs and contain questions for students to answer on their own site pages
2. Course wrap-up page  
~A page that would contain a list of items that need to be completed prior to finishing the class such as evaluations, TI:ME certification forms, etc.
3. Reading and Response (R/R) pages  
~If the instructor decides to post any scenarios specific to a time technology area, it could be posted on this page and discussed in the comment section
4. How-to pages  
~These pages could include quick tutorials for the students that show how to perform a specific task such as embedding a video in WordPress, how to create a Web/Think Quest project, etc.
5. TI:ME resource page  
~A page with information about TI:ME, TI:ME membership, etc.

**Content example of the materials of a student's WC site:**

Working WordPress example site: <http://time2cstudent.wordpress.com>

The minimum suggested framework of a student's site contains the following elements (*Instructor Appendix E* and Demonstration website URL):

1. "About Me" Page  
~A page where the student may list any information that they would like others to know about themselves and their work as a music educator
2. Lesson Plan Pages  
~Each of the technology areas discussed should have their own dedicated lesson plan page that contains the entirety of the lesson plan and all related materials – Instructors may choose to add comments and review each of the lesson plans in each of the students' comment section

### **A Selection of Optional WC Student Pages:**

1. Blog/webquest page  
~Instructors may choose to have students write commentary about each other's Blog/webquest in their comment sections of the site
2. CAI answer page
3. Live journal  
~ Instructors may choose to have the students create a daily journal of the class and create brief WordPress "posts" about their experiences and/or questions

### **Instructor and Student WC Sidebars:**

Instructors may choose to populate a sidebar with class-appropriate widgets. These widgets may include additional Websites, RSS feeds, Twitter updates, and other class-related items. (*Instructor Appendix F*)

### **Additional 3<sup>rd</sup> party integrations with WordPress:**

WordPress provides the ability to combine many existing web technologies with it by utilizing basic HTML or through embedding. WordPress fully supports oEmbed (an open format for embedding information into a website). For more information about additional WordPress integrations please view *Instructor Appendix G*.

## **Sample 5-day Course Design:**

The following class schedule is a suggestion for completing this course in a typical five-day allotment:

### **Day 1**

- Course/Syllabus Overview
- Student Introductions
- (WC component -optional) Create and orient the students with utilizing WordPress (or similar software) as the Web Component of the course
- Have the students create/replicate their typical teaching load/schedules for use with understanding their needs/programs
- Discuss National, State, and Local music standards. Have the students complete the document in Course Appendix B for their particular state
- Part 1, Electronic Musical Instruments
  - Review, development of lesson plans and assessments, create PDF document of lesson plans for distribution
  - Optional activities

## **Day 2**

- Part 2, Music Notation Software
  - Review, development of lesson plans and assessments, create PDF document of lesson plans for distribution
  - Optional activities ~if enough time begin Part 3
- Part 3, Music Production including MIDI Sequencing and Digital Audio
  - Review, development of lesson plans and assessments, create PDF document of lesson plans for distribution
  - Optional activities

## **Day 3**

- Part 3 (continued), Music Production including MIDI Sequencing and Digital Audio
  - Review, development of lesson plans and assessments, create PDF document of lesson plans for distribution
  - Optional activities
- Part 4, Technology-Assisted Learning Software (CAI)
  - Review, development of lesson plans and assessments, create PDF document of lesson plans for distribution
  - Optional activities

## **Day 4**

- Part 5, Multimedia and Digitized Media
  - Review, development of lesson plans and assessments, create PDF document of lesson plans for distribution
  - Optional activities
- Part 6, Information Processing, Computer Systems, and Lab Management
  - Review, development of lesson plans and assessments, create PDF document of lesson plans for distribution
  - Optional activities

## **Day 5**

- Part 6, (continued –if needed) Information Processing, Computer Systems, and Lab Management

- Review, development of lesson plans and assessments, create PDF document of lesson plans for distribution
- Optional activities
- Group presentations of Lesson Plan(s)
- Input all student lesson plans into the TI:ME lesson plan database
- Complete course evaluations
- Collect information for submitting course completion by students to TI:ME
- Ensure all students have copies of each student's lesson plans

## **Instructor Notes and Considerations:**

- While optional, implementing the Web Component (WC) will enhance information sharing, document sharing, increase productivity, and provide an additional learning experience for the students in the course. Use of the Web Component is strongly encouraged.
- The instructor may wish to have the students peruse the TI:ME database of lesson plans and other lesson plan resources so that they may gain some insight about technology integrations prior to creating their own.
- Lesson plans may include multiple technology areas, but should emphasize the particular technology area that is the focus of each module.
- Lesson plans may be modified versions of existing lesson plans designed to suit a student's given need or situation. Creativity should be encouraged, but if a student is struggling with coming up with an idea, they may further develop an

existing lesson plan in the TI:ME database or elsewhere.

- Consider having discussion about potential lesson topics among the class, brainstorm with the students about lesson plans that they would like to have developed for their existing classroom situations. This will help ensure that lesson plans are appropriate before students invest too much time in an impractical or inappropriate plan.
- If there is extra time available at the end of a given day, consider having an open discussion of the lesson plans that were developed by the students.
- Course components do not have to be done in sequence, but the listed order is suggested
- The TI:ME 2C course is about creating and exploring lesson plans and curricula, not about teaching the component technology.
- Be sure to look over the *Appendices* in the *Student Workbook* prior to the start of the course, in particular, the lesson plan template and presentation review document.

## Student Syllabus

### **DESCRIPTION:**

Students will use knowledge acquired from the Technology Institute for Music Educators (TI:ME) level one and level two courses (or equivalents) to create standards-based lesson plans. Each lesson plan created will pertain to one of the technology competency areas as specified by TI:ME and should be appropriate for use in the participants' courses or curricula.

### **PRE-REQUISITES:**

Participants taking this course must already be familiar with *TI:ME technology areas of competency in Music Technology* and should have already completed the TI:ME Level one certification (or have equivalent experiences). While some of the technologies used as the focus of the lesson plans may be lightly reviewed or new techniques may be

discussed by the instructor, this course is NOT designed to teach the tools and skill-sets that will be contained within each of the developed lesson plans.

### **ADDITIONAL INFORMATION:**

Participants are strongly encouraged to have copies of their existing teaching assignments so that the instructor may better guide them with the creation of lesson plans appropriate for their particular needs.

Depending upon the institution offering this course, it may be offered for varying amounts of credit. Because of the demanding nature of the TI:ME 2C course, courses are generally limited to a maximum of sixteen students. It is not uncommon in this course for participants to have large time segments where they will be working alone, at their workstations/computers, to complete the tasks and projects assigned as part of this course. All TI:ME instructors are approved by TI:ME and experienced with the instruction of technology to in-service teachers.

### **ASSESSMENT:**

Each instructor will assess students slightly different as required by the institution offering the course. Regardless, assessment considerations will include the quality and completeness of each lesson plan and all assigned work, class participation, and the quality and presentation of the final project.

*This course fulfills 1/3 of the requirements for the TI:ME Level Two Certification.*

### **HARDWARE REQUIREMENTS:**

If the course is taught in a music rich computer lab, there will be multiple workstations available to complete the tasks assigned in the course. Workstations will include various MIDI, audio, and music related hardware as well as broadband access to the Internet.

If the course is taught via an online environment, the student will be required to have a “modern computer system” capable of running current software products. Reliable broadband access to the Internet, as well as an updated and current Internet browser is required. A MIDI controller connected to each participant’s computer is highly recommended. All of the computer’s hardware devices should be updated to their current driver versions. Each instructor will have various hardware requirements for the course and all participants are encouraged to ensure that they have met all of the requirements prior to the start of the course.

## **SOFTWARE REQUIREMENTS:**

Software representative of each of the technology areas will be made available to the students. TI:ME 2C courses taught in a traditional lab setting will have all of the software installed prior to the start of the course.

Courses taught online will have various software requirements and each participant will be expected to have appropriate software available for each of the technology areas used with the lesson plans that they will be developing. Various commercial, freeware, and open-source software may be used to accomplish the tasks within the course. Each instructor will provide a list of acceptable software available for these tasks prior to the onset of the course. *Course Appendix F* contains a number of suggested software programs that may be used as part of this course.

## **BOOKS AND MATERIALS:**

TI:ME 2C specific materials (provided by the instructor):

- TI:ME 2C Syllabus
- TI:ME 2C Student Workbook
- TI:ME 2C Appendices

Recommended text: *Technology Strategies for Music Education* by Rudolph, Richmond, Mash, & Webster. TI:ME Publications, 2005. (ISBN: 0634090607)

## **Optional Additional Texts:**

Alfred Publishing Staff. (2009) *Integrating Technology with Music Instruction: Using standard technology teaching tools to aid student learning and teach essential music skills*. Alfred Publishing.(ISBN: 0739054996)

Burns, Amy. (2009) *Technology Integration in the Elementary Music Classroom*. Hal Leonard. (ISBN: 9781423427575)

Frankel, James. (2009) *The Teacher's Guide to Music, Media, and Copyright*. Hal Leonard. (ISBN: 9781423443445)

Frankel, James and Rudolph, Thomas E. (2009) *YouTube in Music Education*. Hal Leonard. (ISBN: 1423479386)

Rudolph, Thomas E. (2005) *Teaching Music with Technology, 2<sup>nd</sup> edition*. GIA Publications, Inc. (ISBN: 1592009816)

Williams, David and Webster, Peter. (2008) *Experiencing Music Technology, 3<sup>rd</sup> edition*. Schirmer Books. (ISBN: 9780495565543)

### **COURSE DETAIL:**

This course is focused around each participant developing relevant lesson plans and assessment criteria for each of the six areas of technology as defined by TI:ME in the text, *Technology Strategies for Music Education*. Each instructor is required to cover all of the six areas in this course, but the amount of time spent in the course on each area will vary.

The six technology competency areas are:

1. Music Notation Software
2. Electronic Musical Instruments
3. Music Production including MIDI Sequencing and Digital Audio
4. Computer-Assisted Instruction
5. Multimedia and Digitized Media
6. Information Processing, Computer Systems, Lab Management

Instruction in each of the areas may not happen sequentially and will vary among instructors.

### **Web Component (WC)**

The instructor may choose to teach this course in a traditional or online environment utilizing website software to create a course webpage containing additional materials and information for use by the class participants. In addition, participants may be required to create websites utilizing software such as WordPress (<http://wordpress.com>) or Blogger (<http://blogger.com>) as an adjunct in creating a technologically-enhanced learning environment for the course.

If the instructor uses the WC, additional time will be allocated to ensuring that the participants are versed in using the software selected. The WC component will allow students to share, communicate, and navigate each other's materials more easily.

**Electronic Musical Instruments ~ Course Section Overview:**

Each of the participants will demonstrate a proficient level of knowledge with regard to *Electronic Musical Instruments* (EMI) by developing one or two course appropriate lesson plans that will provide an enhanced learning model for their targeted program(s). Each lesson plan should demonstrate a level of mastery with regard to the following competency area topics:

1. The history and development of *Electronic Musical Instruments* and the usage of Music Instrument Digital Interface (MIDI) with regard to music and music education
2. Types and categories of EMIs and related devices (both MIDI and non-MIDI)
  - a. Electronic music keyboards, digital pianos, and synthesizers
  - b. MIDI controllers, audio devices, and sound modules
    - i. Electronic Wind Instruments (EWIs), Electronic Valve Instruments (EVIs), stringed controllers, pitch to MIDI devices, sampling devices, small device audio controllers (iPad, iPhone, Android, etc.), percussion-related devices, etc.
  - c. Audio processing gear, audio mixing gear, sound reinforcement gear, etc.
3. Current and relevant EMI and related EMI devices based on the items in number two above for the pre-elementary, primary, and secondary music classrooms.
4. The current MIDI standards and related specifications and their relevance with regard to the mastery of the competency standard:
  - a. General MIDI (GM)
  - b. General MIDI 2
  - c. MIDI Lite
  - d. Supersets of GM: XG and GS
5. Finding, implementing, and arranging available ensembles scores and method books for use with an EMI or mixed EMI ensemble or group.
6. EMI performance techniques as they relate to students performing on EMI devices and considerations of teaching techniques for teachers with little-to-no piano skills
7. Creating music, music examples, or resources for distribution via traditional or online media sources
8. Budget considerations for implementing and maintaining EMI devices as course assistive learning tools or as ensembles or parts of an ensemble
9. Developing solid criteria for evaluating and assessing the progress of the students for whom the lesson plan is written

*Instructors may also include a number of content reinforcement activities for students to complete that are related to each topic. In addition, all participants will be required to present at least one of the lesson plans to the instructor and classmates as part of this course.*

### **Music Notation Software ~ Course Section Overview:**

Each of the participants will demonstrate a proficient level of knowledge about *Music Notation* software by developing one or two course appropriate lesson plans that will provide an enhanced learning model for their targeted program(s).

Each lesson plan should demonstrate a level of mastery with regard to the following competency area topics:

1. Related definitions associated with *Music Notation* software
2. An understanding of the mainstream notation software programs: *Finale*, *Sibelius*, *MuseScore*, *Noteflight*, etc.
3. Software that allows for the creation of *Music Notation*:
  - a. *Music Notation* software
  - b. Sequencing software with notation capabilities
  - c. Early childhood software or CAI software with notation capabilities
  - d. Other MIDI devices/software with notation capabilities
4. Copyright law as it pertains to *Music Notation* software and usage
5. Advanced features of notation software such as video integration, music theory/composition tools, scanning of music, etc.
6. Importing MIDI files through the notation software
7. Exporting created notation for use in word processing software or used online with websites or *PowerPoint*-style presenting software
8. Exporting notation in both MIDI and XML formats for use with other notation programs or embedding in various online formats
9. Creating audio files (MP3, WAV, etc.) directly from notation software for use with various online sources and/or local software uses
10. Creating short notation examples for use in student hand-outs or demonstrative purposes including using built-in options and screen-capture software for creating images of the notation
11. Printing completed notation as a score, in parts, or as a file format such as PDF
12. Budget considerations for implementing and maintaining *Music Notation* in a classroom environment – site licenses, lab-packs, concurrent licensing, other related needs
13. Developing solid criteria for evaluating and assessing the progress of the students for whom the lesson plan is written

*Instructors may also include a number of content reinforcement activities for students to complete that are related to each topic. In addition, all participants will be required to present at least one of the lesson plans to the instructor and classmates as part of this course.*

**Music Production including MIDI Sequencing and Digital Audio ~ Course Section Overview:**

Each of the participants will demonstrate a proficient level of knowledge with regard to *Music Production* software by developing one or two course appropriate lesson plans that will provide an enhanced learning model for their targeted program(s).

Each lesson plan should demonstrate a level of mastery with regard to the following competency area topics:

1. Related *Music Production* software definitions
2. The various types of software that are used in music production:
  - a. MIDI and audio players, both simple and complex
  - b. *Music Production* software based upon sequencing - simple and complex, local and/or Web-based
  - c. Digital audio production software, simple and complex, local and/or Web-based
  - d. Production software that integrates audio production and video production elements and design – local and/or Web-based
  - e. Loop-based software such as *Garage Band*, *MixCraft*, *Myna*, etc. – local and/or Web-based
3. Various advanced features of the *Music Production* related software programs
4. The creation of music or music examples to be used as accompaniments or in combination with rich-media or rich-media Web-based items
5. An understanding of the various audio formats (and qualities) and their usage: AAC, MID, MP3, MP4, WAV, etc.
6. Exporting created audio file formats to other digital audio forms
7. Exporting MIDI creations to standard MIDI files or XML files for use with other MIDI-enabled products
8. Configuring MIDI devices for use as an audio input device with the *Music Production* software
9. Importing and transcoding audio to various audio formats that are necessary for different tasks
10. Sharing of digital audio through Web 2.0 applications such as *Soundcloud*, *Cinch*, etc.
11. Copyright law as it pertains to *Music Production* and digital audio
12. Budget considerations for implementing and maintaining *Music Production* software in a classroom environment – site licenses, lab-packs, concurrent licensing, other related needs
13. Developing solid criteria for evaluating and assessing the progress of the students for whom the lesson plan is written

*Instructors may also include a number of content reinforcement activities for students to complete that are related to each topic. In addition, all participants will be required to present at least one of the lesson plans to the instructor and classmates as part of this course.*

## **Technology-Assisted Learning Software (Computer-Assisted Instruction CAI) ~ Course Section Overview:**

Each of the participants will demonstrate a proficient level of knowledge with regard to *Computer Assisted Learning Software* by developing one or two course appropriate lesson plans that will provide an enhanced learning model for their targeted program(s).

Each lesson plan should demonstrate a level of mastery with regard to the following competency area topics:

1. Related technology-assisted learning definitions
2. Key characteristics and functions of the various types of Web-based and local CAI software:
  - a. CAI-style games
  - b. Drill and practice
  - c. Tutorials
  - d. Computer assisted assessment
  - e. BLU-RAY/DVD/CD/other forms of multimedia
  - f. Wiki-style websites, relevant blogs, community learning pages, and personal learning environments (PLEs)
3. Creation of web-based and local resources for students revolving around classroom topics
4. Choosing CAI programs that properly enhance the learning of the students when added to traditional teaching methods and existing lesson plans
5. Budget considerations for implementing and maintaining music production software in a classroom environment – site licenses, lab-packs, concurrent licensing, other related needs
6. Developing solid criteria for evaluating and assessing the progress of the students for whom the lesson plan is written

*Instructors may also include a number of content reinforcement activities for students to complete that are related to each topic. In addition, all participants will be required to present at least one of the lesson plans to the instructor and classmates as part of this course.*

## **Multimedia and Digitized Media ~ Course Section Overview:**

Each of the participants will demonstrate a proficient level of knowledge with regard to *Multimedia and Digitized Media (Digital Media)* by developing one or two course appropriate lesson plans that will provide an enhanced learning model for their targeted program(s).

Each lesson plan should demonstrate a level of mastery with regard to the following competency area topics:

1. Related multimedia and *Digital Media* definitions
2. The various forms of *Digital Media*:
  - a. Audio
  - b. Graphics
  - c. MIDI
  - d. Text
  - e. Video
3. The various types of multimedia authoring software, both web-based and locally stored
4. Methods by which the various forms of *Digital Media* are manipulated
5. Methods by which the various forms of *Digital Media* are stored or transferred
6. Embedding of *Digital Media* in traditional forms such as word processing and presentation software
7. Embedding of *Digital Media* in websites and online resources
8. Using *Digital Media* in Web 2.0 style websites, social media, and online resources
9. The creation and storage of *Digital Media* via various mechanisms – hardware and software based
10. Conversion and transcoding of one similar digital form to another (i.e. .MP3 to .WAV; .MOV to .AVI, etc.)
11. The ability to create a media rich website, blog, wiki, or online resource complete with *Digital Media* resources
12. Copyright law as it pertains to *Digital Media* usage
13. Budget considerations for implementing and maintaining *Digital Media* related hardware, software, and peripherals
14. Developing solid criteria for evaluating and assessing the progress of the students for whom the lesson plan is written

*Instructors may also include a number of content reinforcement activities for students to complete that are related to each topic. In addition, all participants will be required to present at least one of the lesson plans to the instructor and classmates as part of this course.*

## **Information Processing, Computer Systems, and Lab Management ~ Course Section Overview:**

Each of the participants will demonstrate a proficient level of knowledge with regard to *Information Processing, Computer Systems, and Lab Management* by developing one or two course appropriate lesson plans that will provide an enhanced learning model for their targeted program(s).

Each lesson plan should demonstrate a level of mastery with regard to the following competency area topics:

1. Related *Information Processing, Computer Systems, and Lab Management* definitions
2. Computer operating systems and their differences and similarities:
  - a. *Mac*
  - b. *Windows*
  - c. *Linux*
  - d. Mobile platforms such as *iPad, iPhone, Android, etc.*
3. Software related music education tools:
  - a. Word processing, spreadsheet, productivity-related
  - b. Desktop and online publishing tools
  - c. The various forms of authoring software
  - d. Administration software (grading, managing, etc.)
  - e. Presentation software such as *PowerPoint* or *Prezi*
  - f. Marching band drill design and other niche software programs
  - g. Various forms of online communication, website development, and social media
  - h. Troubleshooting skills
4. Hardware-related music education and lab/workstation needs:
  - a. Computer specifications
  - b. Network specifications and needs (WAN, LAN, WI-FI, proxy, etc.)
  - c. Computer components (monitor, hard drive, MIDI devices, etc.)
  - d. Computer installation, setup, and care
  - e. System software installation, setup, and care
  - f. Computer security, anti-virus, anti-malware, anti-spyware protection
  - g. Interconnectivity of music keyboards and communication needs of a piano/keyboard lab
  - h. Teacher workstation needs, LCD projectors, interactive whiteboards (SMART, Promethean, etc.)
  - i. Classroom audio and sound reinforcement systems
  - j. Computer system backup and protection

- k. Troubleshooting skills
- 5. Classroom lab types:
  - a. Keyboard/piano lab
  - b. Keyboard/piano lab with desktop/laptop and MIDI
  - c. Digital Audio Workstation (DAW) lab
  - d. Ad-hoc music computer labs utilizing desktops or laptops with Internet access without MIDI devices
  - e. Ad-hoc music computer labs utilizing desktops or laptops with Internet access and portable MIDI devices
  - f. Mobile-based electronic lab resources for teachers without a permanent classroom
  - g. Resources for help with designing a lab “in house” or finding qualified music education, lab-specific companies
- 6. Budget considerations for implementing and maintaining a music education based computer lab
- 7. Music and Arts related organizations that help with grant funding and grant writing for music technology needs
- 8. Online resources for help, support, and discussing the needs associated with the running of music education based computer lab environment
- 9. Developing a solid criteria for evaluating and assessing the progress of the students for whom the lesson plan is written

*Instructors may also include a number of content reinforcement activities for students to complete that are related to each topic. In addition, all participants will be required to present at least one of the lesson plans to the instructor and classmates as part of this course.*

### **TI:ME 2C Final Project:**

During the last day of the course, each participant will select at least one of their lesson plans to present to all of those enrolled in the course.

1. Depending upon each course situation, the lesson may be taught to the entire class or in smaller groups.
2. The lesson plan being taught will be made available to all of the participants either online or directly.
3. If desired, one or more of the course participants may “act” the role of the age-group of those to whom the lesson plan is being taught, this is especially useful if the lesson plan focuses on computer aided instruction (CAI) of any type.
4. Each of the students enrolled in the course will provide written reactions to the author of the lesson plan being observed and taught, either online as comments to written lesson plan or on the included paper form.
5. Demonstration of the lesson plan should not exceed 30 minutes including the time to discuss the lesson plan among the other participants and with the instructor.

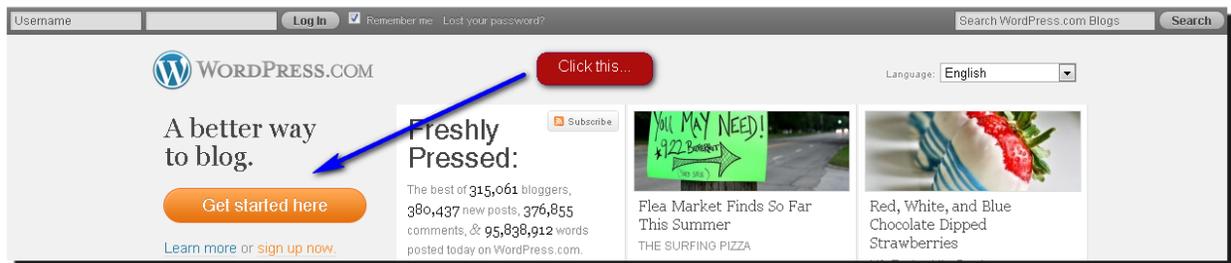
Each instructor will decide whether or not peer feedback and reviews will count toward the participants' overall grade in the course.

*At the end of the course, participants will be required to input all of their lesson plans into the TI:ME database for other TI:ME members to benefit from.*

## Instructor Appendix A – Signing Up For WordPress

1. Open the URL <http://wordpress.com>

2. Click on “Get started here”:



3. Fill-in the appropriate information:

Fill out this one-step form and you'll be blogging seconds later!

**Blog Address**  
Don't worry, you can change this later.

.wordpress.com Free ▼

**Username**

Sign up for just a username.

**Password**  **Confirm**

**E-mail Address**

Subscribe to our blog to learn about new themes, features, and other news.

**Blog Posts Language**  
en - English ▼

You agree to the [fascinating terms of service](#) by submitting this form.



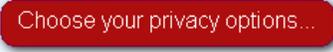
4. Choose the privacy settings:

Blog Title

TI:ME 2C Student Example Site

Blog Language

I will primarily be blogging in .

Privacy  

I want my blog to be .

This means my blog

- private
- viewable by everyone
- viewable by everyone, but to block search engines
- private

5. Find the blog at <http://XXXXXX.wordpress.com>

6. Log-in to the site by visiting <http://wordpress.com> and signing-in or by utilizing this URL convention: <http://XXXXXX.wordpress.com/wp-admin>

A video tutorial of this process may be found here:

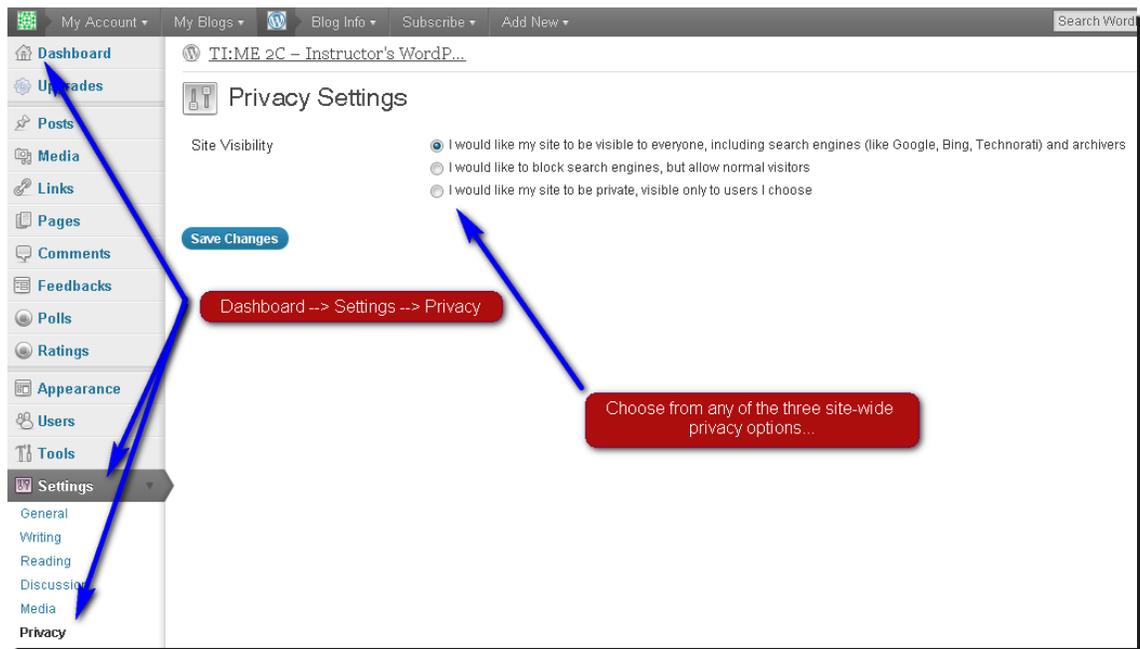
- <http://wordpress.tv/2009/01/05/signing-up-with-wordpresscom/>

## Instructor Appendix B – WordPress Site-wide Privacy Options

Privacy options may be set during the sign-up process of the WordPress site or changed later in the *Privacy Settings* screen of the WordPress dashboard. In addition to site-wide privacy policy settings, individual posts and pages may be marked as public, password protected, or private (*Instructor Appendix C*).

### Changing the site-wide privacy settings of a WordPress site:

1. Open the WordPress dashboard via direct URL (<http://XXXXXX.wordpress.com/wp-admin>) or through the WordPress Admin-bar
2. Choose one of the site-wide privacy options:

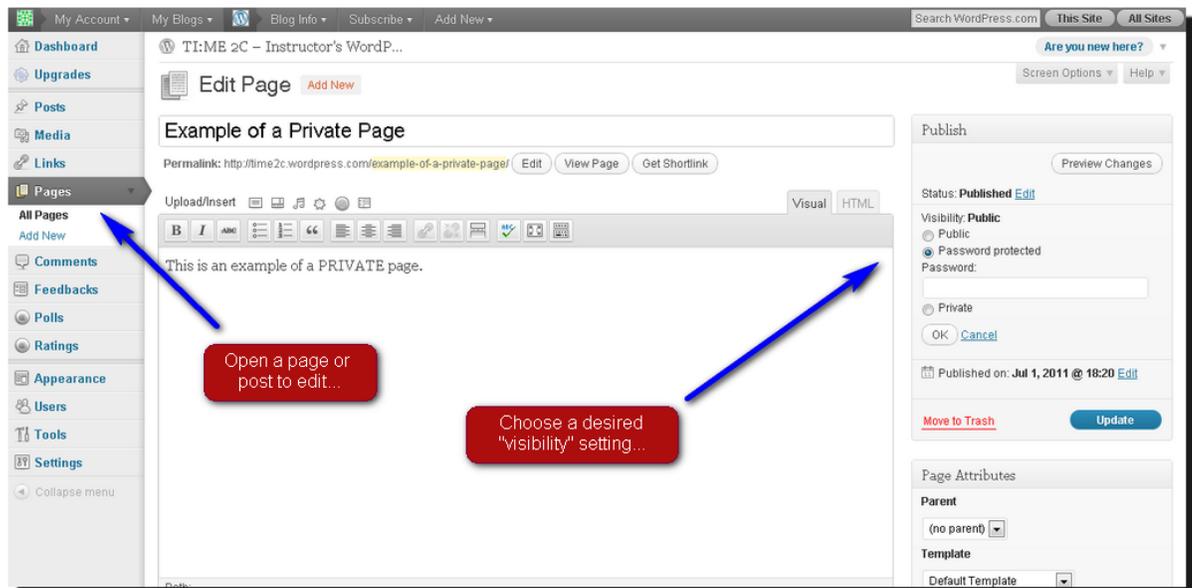


3. Click “Save Changes”

## Instructor Appendix C – WordPress Page/Post Privacy Options

Any WordPress “post” or “page” may have its visibility settings changed. There are three options for this: public, password protected, and private. A *public* post is available to anyone that has access to the site (respecting site-wide policy settings). A *password protected* post/page is only available to those that have the password for the post or page. A post/page that is marked as *private* is only available to registered users of a site that have their user-roles set to *administrator* or *editor* (WordPress site → dashboard → users).

1. Open the WordPress dashboard via direct URL (<http://XXXXXX.wordpress.com/wp-admin>) or through the WordPress Admin-bar
2. Choose the page or post to be edited
3. Change the “visibility” option to the desired setting:



4. Click “Update”

More information WordPress post or page privacy settings may be found here:

- <http://en.support.wordpress.com/posts/post-visibility/>

# Instructor Appendix D – Instructor’s Example Website

**TI:ME 2C – Instructor's WordPress Site Example**  
*TI:ME 2C: Integrating Technology into the Music Curriculum*

Home About About me About you Coursemates Example of a Private Page News/Posts Requirments Resources Syllabus

### Welcome

**Example Welcome Text:** Hello to all and Welcome to the WordPress site of our TI:ME 2C course. This site will be just one of many that we utilize during this course and will act as our class “home” page. It will contain many links and be often referenced... *BookMark It Now!*

Instructors, you may want to include any relevant course and contact information here as well. WordPress typically will use the “posts” as a home/site-index page. To make any-give WordPress page the “index” implement the following steps:

1. Go the dashboard
2. Click “Settings”
3. Click “Reading”
4. Change the “Front page display” to “static”
5. Choose which page you would like to be the front page
6. Choose which page you would like to contain your posts

**TI:ME's Website**

- Welcome to TI:ME
- 2012 National TI:ME Conference with the Jazz Education Network
- Full Summer Course '11 Schedule Announced
- Colorado Summer Courses Announced
- President's Message Spring/Summer '11
- Teacher of the Year 2011: Dr. Joseph Pisano

**July 2011**

M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

◀ Jun

**Recent Posts**

- [Welcome Students](#)

## Related information:

**Site:** <http://time2c.wordpress.com>

**User:** 2ctimeinstruct | **Password:** 1timeinstruct2

*Please don't change any settings...*

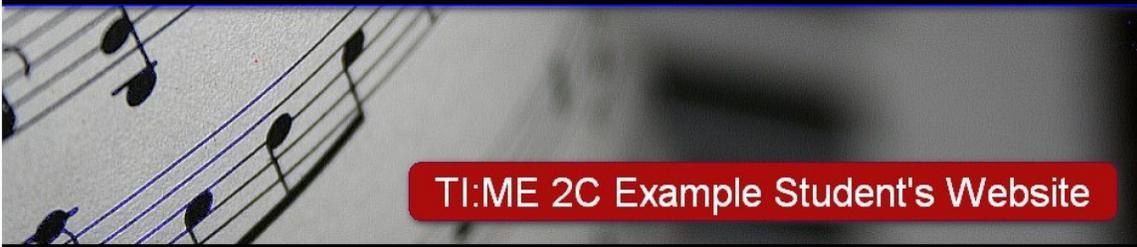
## Related website links:

- Instructor’s site RSS feed: <http://time2c.wordpress.com/feed>
- WordPress sign-up URL: <http://wordpress.com>
- Quick admin to a WordPress.com site: <http://XXXXXX.wordpress.com/wp-admin>
- Video instructions about using WordPress: <http://wordpress.tv/category/how-to>

## Instructor Appendix E – Student’s Example Website

### TI:ME 2C Student Example Site

*TI:ME 2C: Integrating Technology into the Music Curriculum*



Home About me CAI Journal Lesson Plan1 Lesson Plan2 Lesson Plan3 Lesson Plan4 Lesson Plan5 Lesson Plan6 Webquest

#### Welcome

**Example Welcome Text:** Hello and welcome to my TI:ME 2c class website! This site will contain all of my work generated as part of this course. To navigate this site, please click on any of menu items above.

You may find more about by visiting this link: [About me.](#)



#### TI:ME 2C Instructor Demonstration Site:

[Click this link to visit the TI:ME 2C companion instructor demonstration site.](#)

#### TI:ME RSS Feed:

- Welcome to TI:ME
- 2012 National TI:ME Conference with the Jazz Education Network
- Full Summer Course '11 Schedule Announced
- Colorado Summer Courses Announced
- President's Message

### Related information:

**Site:** <http://time2cstudent.wordpress.com>

**User:** 2ctimeinstruct | **Password:** 1timeinstruct2

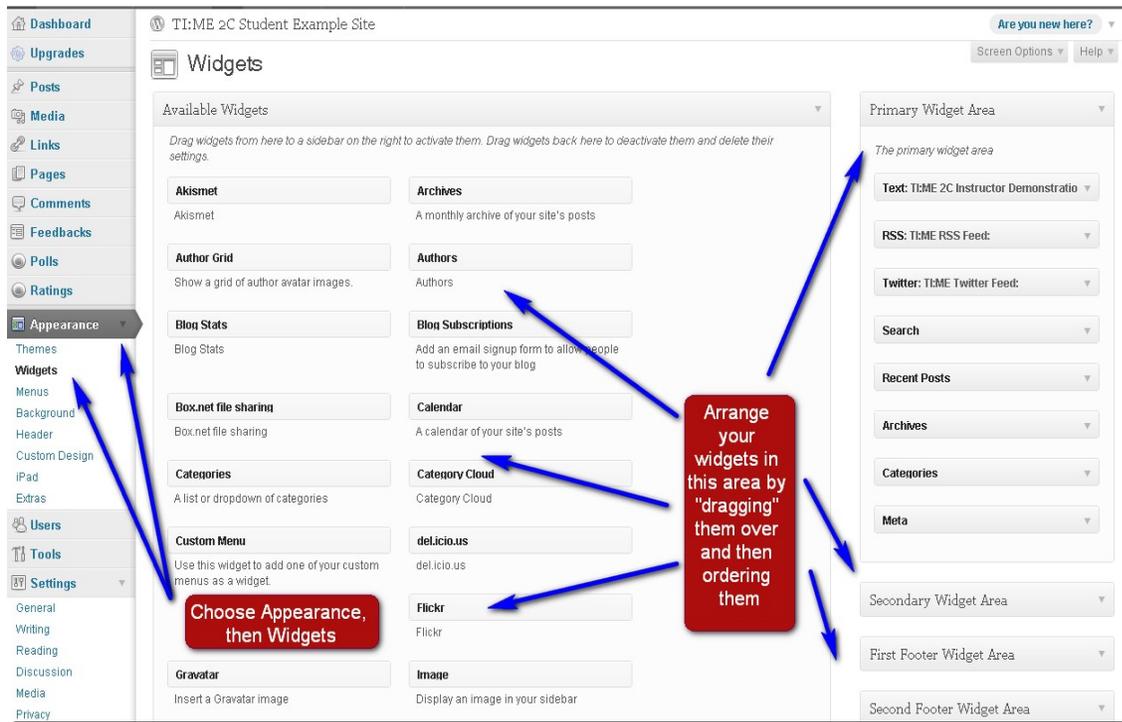
*Please don't change any settings...*

### Related website links:

- Student's site RSS feed: <http://time2cstudent.wordpress.com/feed>
- WordPress sign-up URL: <http://wordpress.com>
- Quick admin to a WordPress.com: <http://XXXXXX.wordpress.com/wp-admin>
- Video instructions about using WordPress: <http://wordpress.tv/category/how-to>

**iPad Note:** *All WordPress.com sites include a beautiful and device-optimized "skin" specifically for enhancing visitors utilizing iPads. This skin will automatically work in conjunction with any chosen WordPress theme.*

## Instructor Appendix F – Sidebars and Widgets



Some WordPress themes include the option to have “sidebars” or “widget areas” (the recommended “Twenty Ten” theme includes these areas). Sidebars allow the instructor and students to create more areas to share information with visitors and provide multiple opportunities to integrate *Web 2.0* technologies and multi-media aspects.

To access the sidebar setup area:

*Open the WordPress dashboard → Click on “Appearance” → Click on “Widgets”*

### **WordPress widgets include:**

- Box.net, Flickr, Gravatar, Meebo, and Twitter integrations
- Blog statistics
- Category and text cloud tagging
- RSS integration
- Site searching capabilities
- Top clicks, posts, and pages listings

### **Activating Widgets:**

To activate a widget simply drag it over to the desired “widget area”, open it, input the desired settings, then click “save”.

# Instructor Appendix G – oEmbed and Other WordPress Integrations

WordPress is extremely flexible and allows for almost endless customizations. To this end, WordPress includes a built-in HTML editor for use with pages, posts, and other items. In addition, WordPress offers native poll daddy.com and oEmbed support.

## Access to the Page/Post HTML editor in Wordpress:

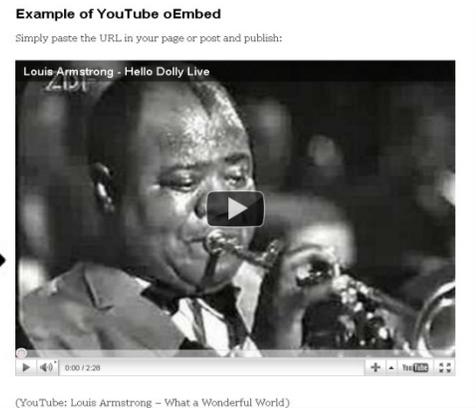
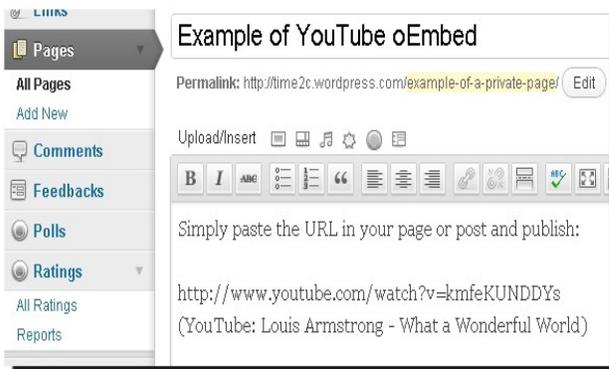
Open the Dashboard → open a post/page to edit → click the HTML tab



## What is oEmbed?

oEmbed is an open format that easily allows users to cut & paste URLs into a site (like WordPress) and change them from simple links to an enhanced embedded object. WordPress supports a number of 3<sup>rd</sup> parties through oEmbed including: Flickr, Photobucket, Scribd, Vimeo, YouTube, and more.

For example, to embed a video from YouTube, simply copy the YouTube URL of the desired video and post it into your page or post (make sure it is not actually linked, but rather simple text only). When the page is viewed, the link will now be transformed into the video and not simply show the link:





## Instructor Appendix H – WordPress.com Related Resources

1. Available Themes - <http://theme.wordpress.com/>
2. Learning WordPress - <http://learn.wordpress.com/>
3. Personalize A WordPress Site - <http://learn.wordpress.com/get-customized/>
4. Publishing Pages/Posts - <http://learn.wordpress.com/get-published/>
5. Adding Images/Video - <http://learn.wordpress.com/get-flashy/>
6. WordPress Forums - <http://en.forums.wordpress.com/>
7. WordPress Apps - <http://en.support.wordpress.com/apps/>
8. WordPress Visual Guide - <http://wordpress.tv/>
9. Lorelle on WordPress – <http://lorelle.wordpress.com>
10. WordPress Features List - <http://en.wordpress.com/features/>
11. WordPress Advanced Services - <http://en.wordpress.com/advanced-services/>
12. Mobile Access to Wordpress: <http://m.wordpress.com>