



**College of Education and Human Development
Division of Special Education and disAbility Research**

Spring 2020

EDSE 517 611: Computer Applications for Special Populations

CRN: 21897, 3 – Credits

Instructor: Dr. Yoosun Chung	Meeting Dates: 3/2/2020 – 5/11/2020
Phone: (703) 988-3486 (text-relay-service)	Meeting Day(s): Asynchronous
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Office Hours: by appointment	Meeting Location: N/A; Online
Office Location: Finley Building, 203B	Other Phone: N/A

- ❖ **Note:** This syllabus may change according to class needs. Teacher Candidates/Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.

Prerequisite(s): Graduate standing, or permission of instructor

Co-requisite(s): None

Course Description

Explores the applications of computer technology for instructional programs and computer skills used by teachers of special populations. Provides experience with computer technology designed for special populations.

Advising Contact Information

Please make sure that you are being advised on a regular basis as to your status and progress in your program. Students in Special Education and Assistive Technology programs can contact the Special Education Advising Office at 703-993-3670 or speced@gmu.edu for assistance. All other students should refer to their assigned program advisor or the Mason Care Network (703-993-2470).

Advising Tip

Did you know you can order an official transcript through Patriotweb? Logon to Patriotweb. Select Student Services. Select Student Records. Select Order Official Transcript.

Course Delivery Method

Learning activities include the following:

1. Learning module lectures, discussions, activities, and participation

2. Software and hardware demonstrations
3. Video and other media supports
4. Group and independent laboratory exploration activities
5. Class presentations

This course will be delivered online (76% or more) using an **asynchronous** format via the Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available on the posted start date of the course.

Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see: https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers

To get a list of supported operation systems on different devices see:

https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems

- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
 - Adobe Acrobat Reader: <https://get.adobe.com/reader/>
 - Windows Media Player: <https://support.microsoft.com/en-us/help/14209/get-windows-media-player>
 - Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations

- Course Week:
Because asynchronous courses do not have a “fixed” meeting day, due dates for each module are specifically listed in the Course Schedule on this syllabus.
- Log-in Frequency:
Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials **at least two times per week.**
- Participation:
Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- Technical Competence:
Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- Technical Issues:
Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Workload:
Please be aware that this course is *not* self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule section of this syllabus. **It is the student’s responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.****
- Instructor Support:
Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
- Netiquette:
The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words.* Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.
- Accommodations:

Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

Learner Outcomes

Upon completion of this course, teacher candidates/students will be able to:

1. Demonstrate an understanding of the history of assistive technology.
2. Describe and implement a comprehensive set of procedures for software review and evaluation for specific populations.
3. Describe and utilize key devices and software tools designed to help individuals with disabilities in educational settings including learning, physical, sensory, and intellectual disabilities.
4. Describe key features in selecting and using an augmentative and alternative communication device for an individual.
5. Define the issues related to the accessibility of the Internet by individuals with disabilities.
6. Evaluate and select appropriate web-based activities for individuals with disabilities.
7. Adapt and modify general education curriculum and class activities using assistive technology to meet the needs of diverse learners.
8. Design an appropriate technology integrated lesson plan for a specific special education population.

Professional Standards

(Council for Exceptional Children (CEC), Interstate Teacher Assessment and Support Consortium (InTASC). Upon completion of this course, students will have met the following professional standards: The standards addressed in this class include CEC Standard 2: Learning environments (InTASC 3) & CEC Standard 5: Instructional planning and strategies (InTASC 7,8).

Required Textbooks

Dell, A., Newton, D., & Petroff, J. *Assistive Technology in the Classroom: Enhancing the School Experiences of Students with Disabilities (3rd ed)*. Upper Saddle River, NJ: Pearson. ISBN-13: 978-0134170411, ISBN-10: 0134170415

Recommended Textbooks

American Psychological Association. (2019). *Publication manual of the American Psychological Association (7th ed.)*. Washington, DC: Author.

Required Resources

Students are required to have consistent and reliable access to a computer with a high-speed internet connection. Students are also expected to have consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course. Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of the course requirements.

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

Tk20 Performance-Based Assessment Submission Requirement

It is critical for the special education program to collect data on how our students are meeting accreditation standards. Every teacher candidate/student registered for an EDSE course with a required Performance-based Assessment (PBA) is required to upload the PBA to Tk20 (regardless of whether a course is an elective, a one-time course or part of an undergraduate minor). A PBA is a specific assignment, presentation, or project that best demonstrates one or more CEC, InTASC or other standard connected to the course. A PBA is evaluated in two ways. The first is for a grade, based on the instructor's grading rubric. The second is for program accreditation purposes. Your instructor will provide directions as to how to upload the PBA to Tk20.

For EDSE 517, the required PBA is **(NO ASSESSMENT REQUIRED FOR THIS COURSE)**. Please check to verify your ability to upload items to Tk20 before the PBA due date.

Assignments and/or Examinations

Performance-based Assessment (Tk20 submission required)

None

College Wide Common Assessment (TK20 submission required)

None

Performance-based Common Assignments (No Tk20 submission required)

None

Other Assignments

1. Lesson and Lab Participation (40 points; 20 points for Lessons, 20 points for Labs)

Students are expected to complete activities within the Lesson module and the corresponding Lab module for a specified topic. A Lesson module generally contains readings, videos, and activities that introduce a specific topic. A Lab module generally provides tool demonstrations, user perspectives/experiences, and opportunity for tool exploration based on a specific topic. Over the course of the semester students are expected to complete 12 Lesson modules and 12 Lab modules.

Within any specific Lesson or Lab module, students will be presented with a series of activities. Some activities such as viewing a video or reading a chapter in the textbook are categorized as "Read/View". Other activities such as taking a quiz are categorized as "Complete". All activities identified as "Complete" must be submitted on-time and be of satisfactory quality to receive participation points

for that module. Credit will not be given for partial or late submissions. Please note that while “Read/View” activities are not “graded”, access to them is being tracked through Blackboard and the content is assessed through additional course assignments.

Students will complete Lesson modules across the entire semester (12 Lessons total).

Students who successfully complete 12 Lesson modules earn 20 points.

Students who successfully complete 11 Lesson modules earn 18 points.

Students who successfully complete 10 Lesson modules earn 16 points.

Students who successfully complete 9 Lesson modules earn 14 points.

Students who successfully complete 0-8 Lesson modules earn 0 points.

Students will complete Lab modules across the entire semester (12 Labs total).

Students who successfully complete 12 Lab modules earn 20 points.

Students who successfully complete 11 Lab modules earn 18 points.

Students who successfully complete 10 Lab modules earn 16 points.

Students who successfully complete 9 Lab modules earn 14 points.

Students who successfully complete 0-8 Lab modules earn 0 points.

All participation points are tracked in the Blackboard gradebook.

The Lesson module and Lab module will become available by 9:00am on Sunday of the specified week stated in the syllabus. All work for those modules will be due on the scheduled due date stated in the syllabus (mostly by 11:59pm, Wednesdays). Students who submit work on-time and of satisfactory quality will receive full participation points.

- 2. Software Review (15 points)** Students will choose a piece of educational software (or mobile app) of interest to review; it should be a recent version. The software review includes two elements, a written narrative and a completed software evaluation checklist. The narrative should provide a brief description of the software followed by a thorough review of the software and its possible application within a chosen environment. The review should address the primary features of the software including accessibility and other topics addressed in class (content, user friendliness, adult management features, support materials, and value). The software review should be 3-4 pages in length and will serve as a reference for a potential software user. Students will use the software review format introduced in class to evaluate the selected software. Please include a copy of your completed evaluation checklist as an Appendix. Students may not review a productivity/utility software program designed to create content (such as Boardmaker, Word, Inspiration/Kidspiration) for this assignment. Please refer to the scoring rubric posted on Blackboard for additional information on this assignment (please see the Course Schedule on this syllabus for the due date).

3. **Technology Tools Assignment (10 points).** Students will select a broad technology category to research, describe, and analyze based on the needs of an actual student or developed case study. A list of technology categories (i.e. word prediction) will be provided by the instructor. Students will then select two specific technologies within their category (e.g. CoWriter and TextHelp) as part of their analysis. In a 3-4 page paper, students should provide a description of the overall technology including its intended purpose, audience, and important features. Students then should provide a brief description of each specific technology they have selected along with a comparison of product similarities and differences. Finally the paper should include a recommendation for one of the specific technologies based on the needs of a real client or an invented scenario. Please note: it is anticipated that students will use the Internet and/or product catalogs to obtain product information and descriptions, however students are expected to reference such information using proper APA (6th Edition) format including correct referencing both within the narrative and in the reference list. Please refer to the scoring rubric posted on Blackboard for additional information on this assignment (please see the Course Schedule on this syllabus for the due date).

4. **Assistive/Instructional Technology Lesson (35 points)** Students will design an interactive computer-based lesson that has been adapted for a specific population and includes on-line and off-line products. This lesson should integrate instructional and assistive technology and should engage students actively with the technology. Students will write a lesson plan in paragraph or bulleted format addressing all the required elements provided by the instructor and create an on-line and off-line product to be used in the lesson. Students will present the lesson and their products during the last week of class. Please refer to the scoring rubric posted on Blackboard for additional information on this assignment (please see the Course Schedule on this syllabus for the due date).

Course Expectations

- Students must actively check the course Blackboard site and their GMU email for communications from the instructor, at a minimum this should be 2 times per week.
- Students are expected to actively engage in all course activities throughout the semester, which include viewing of all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- Students are expected to demonstrate competence in the use of all course technology. Students are expected to seek assistance if they are struggling with technical components of the course.
- Students should expect that they could experience some technical difficulties at some point in the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Students will use APA 6th Edition guidelines (<http://www.apastyle.org>) for all course assignments. In particular, it is expected that you know how to paraphrase and cite information appropriately to meet both APA guidelines and to avoid plagiarism.

- We will use person-first language in our class discussions and written assignments (and ideally in our professional practice). Please refer to the following website: <https://adata.org/factsheet/ADANN-writing>

Course Policies and Expectations

Attendance/Participation

Students are expected to actively engage in all course activities throughout the semester, which include viewing of all course materials, completing course activities and assignments, and participating in course discussions and group interactions. Grading for work completed in Lectures and Labs is specifically outlined in *Lessons and Labs Participation* within the Other Assignments section of the syllabus. Please note that while only certain learning elements are assessed through “grades”, the instructor can still assess student involvement and engagement using other measures. Blackboard enables the instructor to view such data as login dates, duration of time spent online, access to specific content elements, and more. The instructor will use this data along with course grades to ensure that students are actively engaged in the course. Students struggling to complete work on time or who appear to not be engaging with course content will be asked to conference with the instructor.

Late Work

All activities and assignments should be submitted through Blackboard by 11:59pm on the dates indicated.

Module Lessons and Labs

As specified in the *Lessons and Labs Participation* within the Assignments section of the syllabus, all activities must be completed by the specified due date to receive participation points for each Lesson and Lab. Upon completing all of the required activities, students will be marked as C (i.e., Completed!) for a certain Lesson/Lab. If not all activities are completed, students will be marked as IN (i.e., Incomplete!) for a certain Lesson/Lab in the My Grades section on Blackboard. *Late work will not receive credit.* The instructor recognizes that unexpected challenges may arise during the semester and, therefore, will allow students to request a *one-time extension* that they can apply to a specific Lesson and another for a specific Lab. Students must request the extension by emailing the instructor prior to the original due date; requests made after 11:59pm on the specified due date will not be honored. Students do *not* need to receive confirmation from the instructor to assume they have received the extension; it will be automatic as long as it is the first request. The deadline for extended work will be 11:59pm Sunday instead of specified 11:59pm Wednesday. All extensions will be tracked in the Blackboard gradebook.

Course Assignments (Software Review, Technology Tools, Lesson Plan)

In fairness to students who make the effort to submit assignments on time, there will be a 10% cost reduction *per day* for late papers (For example, a 20 point assignment will lose 2 points per day while a 50 point assignment will lose 5 points per day).

All assignments should reflect graduate-level spelling, syntax, and grammar. If you experience difficulties with the writing process you will need to document your work with the GMU Writing Center during this course to improve your skills.

The instructor reserves the right to request that a student recycle a product that is not satisfactory. In such cases, resubmitted assignments are not eligible for full credit and a response cost of 10 percent may be assessed.

NOTE 1: *As you may know, a cohort course is intensive because it is not held for a full semester (i.e., there are 10 weeks-long for this course). Former students who have taken this class in a full semester (i.e., 15 week-long) said that completing a certain Lesson & Lab (e.g., the AT for students with Physical Disabilities Lesson and Lab) would take 2-3 hours; this makes perfect sense because a certain Lesson & Lab module is equivalent to one graduate level face-to-face class with a duration of 2 hours and 40 minutes). With all of the given estimated time in mind, I would like you to plan out a schedule that meets your needs.*

I divided this course into three broad topics and organized related modules together into each broad topic. Each broad topic has a different number of modules, and thus, the duration to complete each broad topic also varies (please see the proposed Course Schedule on the following page; Course schedule is subject to change for any unforeseen interruptions).

NOTE 2: *Even though I mentioned that students may download trial software to their computer/tablet as part of the course requirements above, I would like to emphasize again that you should download about 10 software programs and install them on your own computer as the semester goes. According to the former students, those of them who had a relatively older computer, they had difficulty downloading the required software programs. Before the last Spring semester, students were able to use the GoToMyPC system, which they could remotely connect Mason lab computers to complete an activity if they did not want to download the software programs on their own computer. However, GoToMyPC has been gone since the beginning of the 2019 Spring semester because of the security reason. I am sorry, but it is not my decision, but a department decision.*

In the previous semesters, I gave alternative activities to students who had difficulty downloading a specific program, but obviously, they were not able to learn some useful programs which I wanted my students to learn. I just hope that not many students will have difficulties downloading software in this class.

Please do not procrastinate! Each Lesson and Lab module has a list of activities and thus you will NOT be able to complete them if you wait too long as the due dates get closer. Again, a certain Lesson and Lab module will take 2-3 hours to complete. Please plan ahead accordingly to fit your busy life schedules.

Grading Scale

95-100 = A

90-94 = A-

86-89 = B+

83-85 = B

80-82 = B-

70-79 = C

< 70 = F

***Note:** The George Mason University Honor Code will be strictly enforced (see <https://oai.gmu.edu/> and <https://catalog.gmu.edu/policies/honor-code-system/>). Students are responsible for reading and understanding the Code. “To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.” Work submitted must be your own new, original work for this course or with proper citations.

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. See <https://cehd.gmu.edu/students/policies-procedures/>.

Class Schedule

***Note:** Faculty reserves the right to alter the schedule as necessary, with notification to students.

Module	Module Available *	Module Topic	Module Due **	Major Assignments Due ***
Broad Topic 1: AT Introduction and Benefits of Computer Use in Special Education				
1	3/1, Sunday	Course Orientation	3/18, Wednesday	Software Title Sign Up (3/22, Sunday)
		Lesson and Lab: Introduction to AT		
		Lesson and Lab: Teacher Productivity Tools		
		Lesson and Lab: Selecting Software and Apps		
Broad Topic 2: Assistive Technology Accommodations for Different disabilities				
2	3/15, Sunday	Lesson and Lab: AT for Students with Physical Disabilities	4/15, Wednesday	<i>Suggested Due Date for the first three modules (i.e., Physical, Communication, Sensory): 4/4, Saturday</i>
		Lesson and Lab: Augmentative and Alternative Communication		

		Lesson and Lab: AT for Students with Sensory Impairments		Technology Tools (4/19, Sunday)
		Lesson and Lab: AT for Students with Learning Disabilities - Reading Tools		
		Lesson and Lab: AT for Students with Learning Disabilities –Writing Tools		
Broad Topic 3: Assistive Technology Integration in the Curriculum				
3-1	4/12, Sunday	Lesson and Lab: Accessing the General Curriculum-Language Arts	4/29, Wednesday	Assistive/Instructional Technology Lesson Plan and Adaptation Topic Proposal (4/29, Wednesday)
		Lesson and Lab: Accessing the General Curriculum-Math, Science and Social Studies		
		Lesson and Lab: Authoring Tool		
3-2	4/12, Sunday	Lab Only: Using the Internet for Instruction	5/4, Monday	
		Lesson Only: AT and the IEP		
		Assistive/Instructional Technology Lesson Plan and Adaptation Please note: You will receive a notification to your GMU email when the official course evaluation is available for this course. The release date for the evaluation is not in our control, but my assumption is that it will be released the second week of November, but could be sooner.		Assistive/Instructional Technology Lesson Plan and Adaptation Narrative, Materials, and Presentation & TK 20 Submission (5/10, Sunday) Peer Feedback & Instructor Developed Course Evaluation (5/11, Monday)

- * Modules will be made available by 9:00am on the scheduled availability date (Sundays)
- **All modules activities are due by 11:59pm on the scheduled due date (Mostly Wednesdays, except 3-2)
- ***Three major assignments (Software Review, Technology Tools & Assistive/Instructional Technology Lesson Plan) are due by 11:59pm on the scheduled due date (Sundays)

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/>).
- Students must follow the university policy for Responsible Use of Computing (see

<http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).

- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <https://ds.gmu.edu/>).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/>.

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:

- As a faculty member, I am designated as a “Responsible Employee,” and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>.
- For additional information on the College of Education and Human Development, please visit our website <http://cehd.gmu.edu/>.

Appendix
Assessment Rubric(s)
Assistive Instructional Technology Lesson

Assignment Components	Points	Comments
Narrative (15 Points)		
<ul style="list-style-type: none"> • <u>Lesson Plan (4 Points)</u>: Submission of a detailed yet concise lesson plan which includes a thoughtful description of: <ul style="list-style-type: none"> ○ Topic and Goal (SOL or ASOL) ○ Content Area & Grade Level ○ Materials Needed ○ Student Activities/Procedures ○ Sample Assessment ○ Extension Ideas 		
<ul style="list-style-type: none"> • <u>Differentiation (5 Points)</u>: Narrative includes the identification and explanation of specific options (2 per disability) for differentiating this lesson using assistive technology devices and strategies needed to modify the lesson for EACH disability area (i.e., Intellectual, Physical, Sensory, Communication, Learning/Emotional disabilities). 		
<ul style="list-style-type: none"> • <u>Online Product Description (3 Points)</u>: Narrative includes a relevant explanation of the online product developed for specified population, 2-3 paragraphs. 		
<ul style="list-style-type: none"> • <u>Offline Product Description (3 Points)</u>: Narrative appropriately describes the purpose of the offline adaptation, how it was developed, the AT strategies incorporated, and how it can be integrated into the lesson to benefit students with disabilities, 2-3 paragraphs. 		
Online Product (6 Points) - Submission		
<ul style="list-style-type: none"> • <u>Advanced Program Features (3 Points)</u>: You should incorporate advanced features of the software program. 		
<ul style="list-style-type: none"> • <u>Interactivity (3 Points)</u>: Target students in the lesson would directly engage (interactive) with the online product either during instruction, independent practice, or as an assessment activity. 		
Offline Product (6 Points)		
<ul style="list-style-type: none"> • <u>Relevance (3 Points)</u>: Submission of offline product that is relevant for lesson and specified population. 		
<ul style="list-style-type: none"> • <u>Multiple AT Strategies (3 Points)</u>: Submission of an offline product that incorporates multiple (at least 3) assistive technology strategies. 		

Presentation (8 Points)		
<u>Presentation (5 points)</u> Thoughtful and creative <u>narrated Powerpoint presentation</u> includes: <ul style="list-style-type: none"> • Description of each area of lesson plan • Explanation of the adaptations you made and your reasons • Presentation and demonstration on and offline products • Explanation of connection between on and offline products <u>Comments (3 points)</u> <ul style="list-style-type: none"> • Provide substantial and meaningful comments to at least 3 peers after reviewing their projects. 		
Total Number of Points (35 possible points)		