Planning and Evaluation Tracking

College Year: 2007-2008

Division of: Allied Health **Person Responsible: Bill Crawford**

Department of: Medical Laboratory Technology **Person Responsible: Jan Martin**

Purpose Statement: "The Medical Laboratory Technology program at Amarillo College is dedicated to providing students with the academic knowledge, the technical training, and the professional skills to enable them to serve as vital members of the healthcare team, within the framework of the Medical Laboratory Technician, in order to enhance the quality of life for individuals in and beyond our service area."

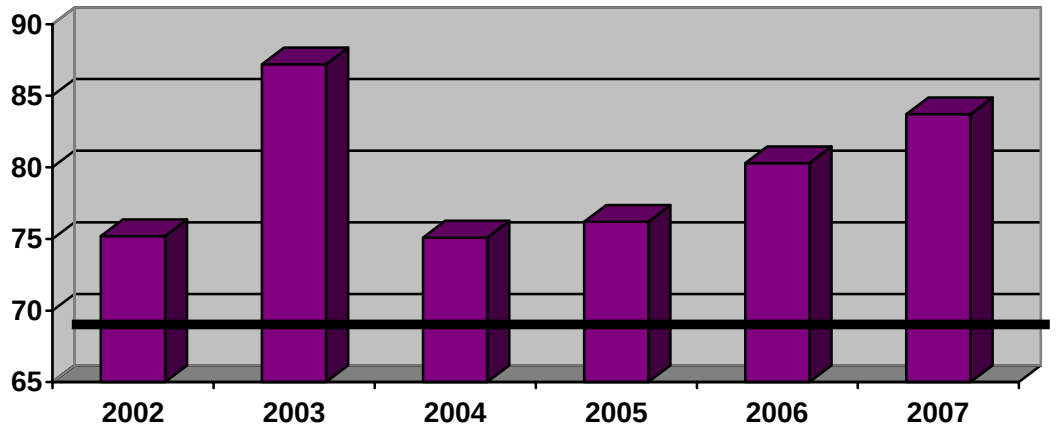
Goal Statements	Objectives/Outcomes (including assessment tools and standards)	Results	Use of Results (including improvements and revisions)
1. Students will be equipped with the cognitive knowledge and psychomotor skills for analysis and clinical decision-making, information management, regulatory compliance, education, and quality assurance/improvement wherever laboratory testing is researched, developed or performed.	A. 100% of graduating Sophomore students will meet or exceed a score of 70% on at least one of three final, comprehensive capstone exams, administered during the final semester of the Medical Laboratory Technology program. The tests are composed of questions covering all of the major and minor disciplines in clinical laboratory science. The questions utilize three taxonomic levels (recall, interpretation, and problem solving), and they are derived from registry-type questions from various nationally recognized Medical Lab registry review texts.	A. 2007 Class Average = 83.71% Class Range = 70.0%-94.5% (Please see chart/table 1A)	A. Initially, one student out of 14 did not pass one of the three final comprehensive capstone exams. The student had some serious, documented health issues at that time requiring surgical intervention, and thus warranted special concessions. As a result, the student was counseled, given study activities, special assignments, and was allowed to retake the exam two months later, with the stipulation that she would receive a grade of “F” for the course if she did not pass the exam at that point, as per the course syllabus. The student retook the exam and scored a 91.0%. Thus in the final analysis, 100% of the students achieved a score well above the target score of 70%. The MLT faculty will continue to re-evaluate test questions to incorporate those related to new and emerging technologies in Clinical Laboratory Science.

	B. 100% of the students will achieve a score of 70% or better on the Task List student evaluation instruments in all Practicum I and II rotations, during the Sophomore year of the Medical Laboratory Technology program. This instrument provides an evaluation of the essential cognitive and psychomotor aspects of Medical Laboratory Technology in a professional, medical setting.	B. Students in the graduating class of 2007 earned Task List scores from 71.0% to 101.0%, with an overall average of 93.66% (Please see chart/table 1B)	B. The results over the past several years continue to be well above the target score of 70%. The MLT faculty will continue to incorporate current and new technologies into laboratory courses to well prepare student for Practicum experiences.
2. Students will be able to demonstrate graduate/entry level technician knowledge and performance of routine and special clinical laboratory tests as the primary analyst, making specimen oriented decisions based on predetermined criteria, including a working knowledge of critical values.	A. 100% of all Medical Laboratory Technology Program graduates will have achieved a score of "Pass" on a Pass/Fail basis, indicating cognitive and psychomotor competency, for all areas indicated on the Amarillo College Medical Laboratory Technology Competency Profile. The profile is updated by program officials and adjunct clinical faculty at the conclusion of each semester of the Medical Laboratory Technology program, and completed prior to the last semester of the program. The profile includes basic tasks and psychomotor skills required of the entry level Medical Laboratory Technician.	A. 2007 Pass/Fail Rate = 100% Pass (Please see chart/table 2A)	A. The Pass/Fail rate for the Medical Laboratory Technology Student Competency continues at a level of 100% passing. The faculty will continue to monitor student competency in all areas of the clinical laboratory, and also work with clinical/adjunct faculty to correct any deficiencies that arise.
	B. 100% of all program graduates will receive an average score of 3.5 or greater, a Likert scale of 1-5, on Employer Satisfaction Surveys. The surveys are mailed out to employers approximately 9 months to one year post graduation. The surveys include questions that encompass all three taxonomic domains. Specifically, technical work performance and professional skills and attitudes are addressed and evaluated.	B. 2006 Employer Satisfaction Survey Results = 3.26 on a Likert scale of 1-5 (Only 1 survey returned) (Please see chart/table 2B)	B. The Employer Satisfaction Survey Results for the Medical Laboratory Technology graduates has consistently been at a level well above the 3.5 standard, with the exception of 2006. It is essential to note, however, that there were only three graduates in 2006 and despite numerous attempts to contact employers of graduates, we only had one survey returned. The faculty will continue to monitor student performance in all areas of the clinical laboratory, and also work with clinical/adjunct faculty and

			prospective employers to correct any deficiencies that arise in student performance prior to graduation from the program, and subsequent employment. In addition, the faculty have increased their emphasis on work ethics, and have incorporated a work ethics program, created by the state of Georgia. Students are now evaluated on their work ethics and given at least one work ethics assignment each week to be sure that they are aware of the true value of work ethics. It is hoped that this measure will result in significantly better Employer Satisfaction Survey results with the graduating class of 2007.
3. Knowledge and communication skills that extend to collaborative, consultative, and educational interactions with laboratory professionals, other healthcare professionals, patients, and the general public.	A. 90% of all currently enrolled Freshmen and Sophomore the students in the Medical Laboratory Technology Program will prepare an informational visual presentation pertaining to the clinical laboratory profession. Student participation will be evaluated by their instructors as part of their weekly Work Ethics grades on the basis of "participated/did not participate." These presentations are utilized to present information regarding different aspects of laboratory medicine during National Medical Laboratory Week, and are viewed by students and faculty in the Allied Health Division and the general public. The purpose of the presentations is to educate other medical professionals as well as the general public, and to promote the laboratory profession. All students enrolled in the Medical Laboratory Technology program are asked to participate.	A. 2007 participation = 86.0% (Please see chart/table 3A)	A. This is a requirement for the students in the Medical Laboratory Technology program, however we feel that it is an excellent opportunity for students to develop additional knowledge and better public relations skills. In addition, it provides an occasion for students to promote their chosen profession to other health professional, as well as the general public. The 86.0% rate of participation is below the standard of 90%. The faculty of the Medical Laboratory Technology program have revised requirements and created incentives for student participation. In addition, the project is now part of the work ethics evaluation for both Freshmen and Sophomore level students, and is also part of the research grade for Sophomores. It is to be hoped that this will encourage greater participation.

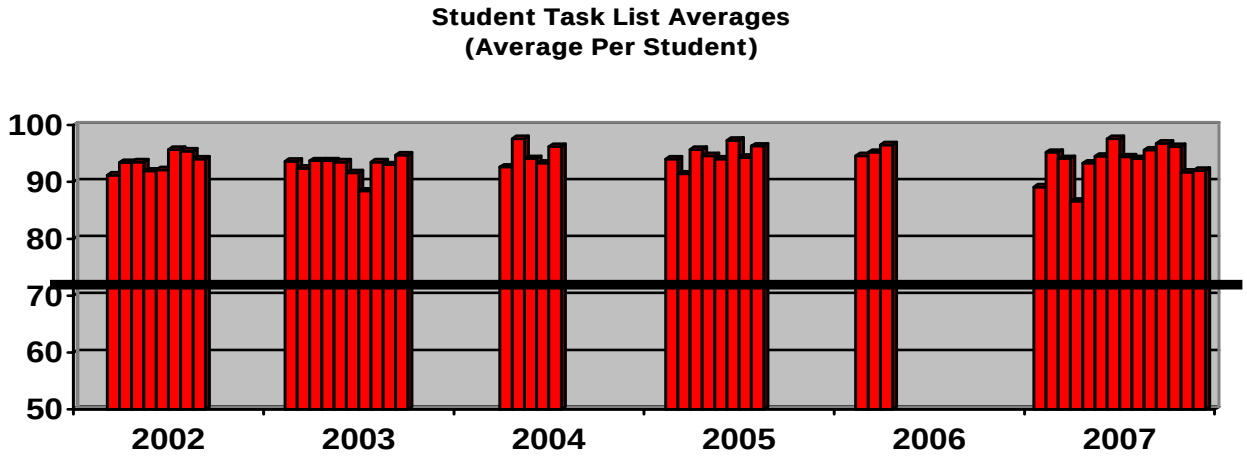
	B. 100% of the Sophomore students will prepare and present an in-depth advanced research project, and achieve an average score of 90%, as evaluated by their instructor and their peers. The project will include a research paper prepared according to specific guidelines, set forth by program officials. The students will present their research to the Med Lab faculty and to their peers during the last semester of the Medical Laboratory Technology program. The presentation must include audio-visual aides and must demonstrate sufficient depth of knowledge as would be expected of students at this level of education. Evaluation of the presentation based on appropriate selection of subject, depth of subject matter, structure of project, communication/presentation techniques, and audio/visual aides.	B. 2007 Research Presentations = 95.7% (Please see chart/table 3B)	B. The average student score in 2006 was slightly greater than the average student score in 2005. The faculty will continue to put greater emphasis on this project and encourage students to augment their presentation skills prior to actual delivery of their research presentation.
4. Demonstrated capacity for calm and reasoned judgment, taking responsibility for one's own actions, and a strong commitment to patient welfare. Ethical and moral attitudes and principles that are necessary for gaining and maintaining the confidence of patients, professional associates, and the community at large.	A. 100% of the students will achieve a score of 70% or better on the Student Professional Evaluation instruments in all Practicum I and II rotations, during the Sophomore year of the Medical Laboratory Technology program. This instrument provides an evaluation of the affective aspects of Medical Laboratory Technology in a professional medical setting including professionalism (attire, demeanor and conduct), dependability, ability to reason and learn, initiative, attitude, and adaptability.	A. Students in the graduating class of 2006 earned Student Professional scores from 85.3% to 100.0%, with an overall average of 93.8% (Please see chart/table 4A)	A. The results are statistically similar to those of 2005, with a difference of -0.2% The faculty will continue to emphasize the essential qualities of professionalism in the medical laboratory setting.

CHART/TABLE 1A – COMPREHENSIVE CAPSTONE EXAMINATIONS



"Best of Three" Individual Student Scores (%)	2002	2003	2004	2005	2006	2007
	70.0	94.0	70.0	70.0	82.5	80.5
	76.0	88.0	86.0	68.0	80.5	82.0
	82.0	78.0	73.5	82.5	78.0	94.0
	73.0	88.0	72.0	70.5		79.0
	74.0	90.0	74.0	74.5		83.5
	76.0	87.0		84.0		74.0
	72.0	86.0		77.5		84.5
	80.0	84.0		82.5		70.0
		86.0				77.0
		90.0				91.0
						90.0
						91.5
						80.5
						94.5
Class Average	75.2	87.1	75.1	76.2	80.3	83.3

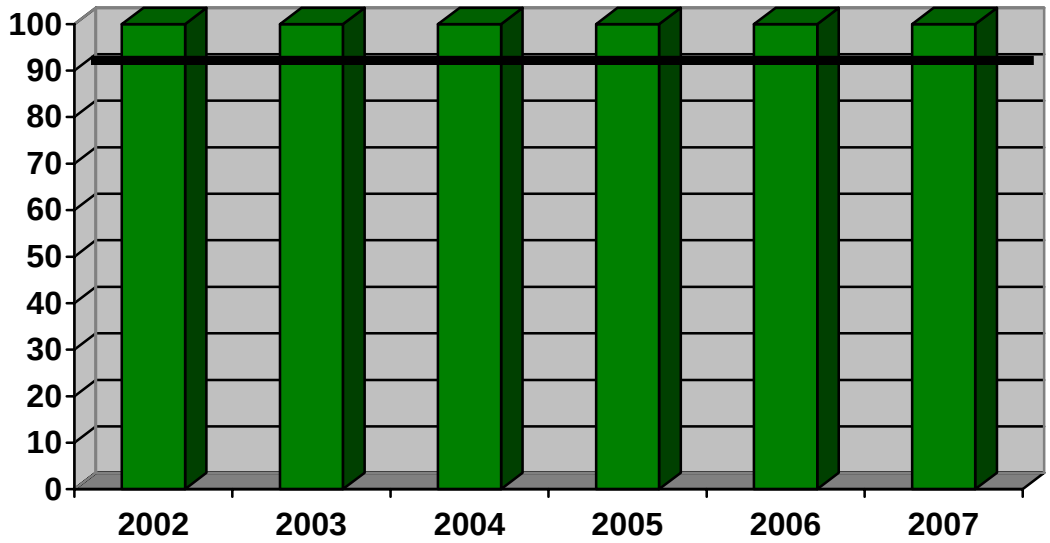
CHART/TABLE 1B – STUDENT TASKLIST EVALUATIONS



Graduating Class

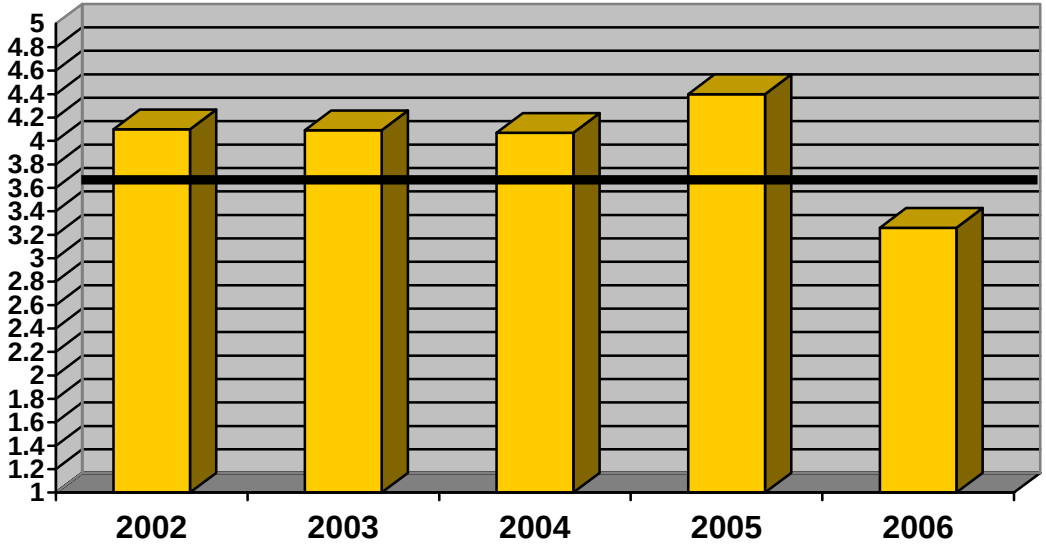
	2002		2003			2004		2005		2006	2007				
Individual Student Scores (%)	88	83	95	83	96	95	90	92	97	99	84	76	100	92	92
	86	95	89	91	100	95	97	89	95	89	98	93	91	95	95
	84	100	95	82	100	94	92	93	92	97	95	95	100	95	95
	95	90	90	97		95	100	93	95	91	86	95	99	90	89
	95	93	95	97		90	95	95	98	95	89	100	100	93	95
	92	84	96	95		83	95	99	88	95	95	90	99	94	94
	98	120	95	100		91	88	96	100	95	95	94	100	86	87
	92	95	95	94		90	95	97	96	95	93	95	95	90	93
	95	89	83	100		93		88	100	85	90	100	95	92	94
	91	93	90	95		99		85	100	97	94	89	95	99	98
	91	95	94	97		95		95	100	100	93	85	95	97	94
	100	93	95	100		95		93	89	95	94	80	95	100	94
	91	100	95	97		75		87	83	100	90	98	95	95	96
	95	91	95	76		85		95	96	95	91	94	98	94	97
	92	95	95	95		87		100	99	94	87	71	90	97	96
	93	95	86	95		82		94	95	90	96	94	95	93	
	99	99	90	100		95		95	98	98	93	93	95	90	
	99	95	96	95		99		98	100	100	95	100	100	98	
	95	95	98	100		95		95	100	95	98	93	95	99	
	95	95	96	98		93		92	93	100	95	94	95	90	
	95	88	95	100		96		96	100	99	95	95	95	95	
	92	94	99	91		92		100	95		100	100	90	82	
	85	95	94	86		91		95	98		89	95	99	95	
	96	95	96	98		95		96	93		98	93	92	95	
	87	95	91	95		93		92	95		100	94	82	95	
	90		91	93		95		88			94	95	95	95	
	95		96	90		89		93			71	97	99	96	
	98		90	94		90		98			93	96	100	95	
	92		95	87		97		97			85	94	91	95	
	95		87	97		95		85			101	90	95	95	
	90		95	100		95		93			93	92	95	100	

CHART/TABLE 2A – STUDENT COMPETENCY PROFILES



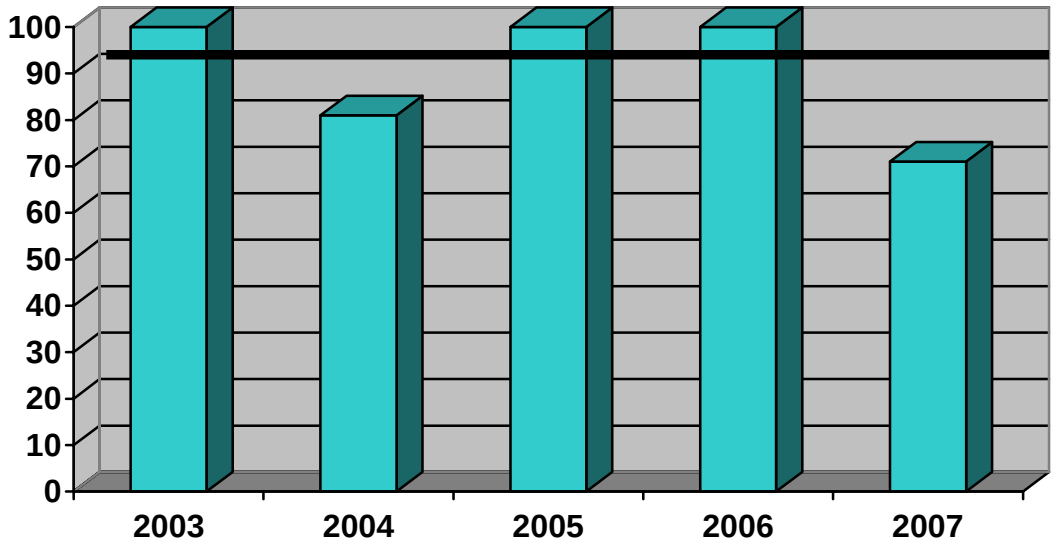
	2002	2003	2004	2005	2006	2007	
Individual Student Pass/Fail	Pass	Pass	Pass	Pass	Pass	Pass	Pass
	Pass	Pass	Pass	Pass	Pass	Pass	Pass
	Pass	Pass	Pass	Pass	Pass	Pass	Pass
	Pass	Pass	Pass	Pass		Pass	Pass
	Pass	Pass	Pass	Pass		Pass	
	Pass	Pass		Pass		Pass	
	Pass	Pass		Pass		Pass	
	Pass	Pass		Pass		Pass	
		Pass				Pass	
		Pass				Pass	
Class Average	100% Pass	100% Pass	100% Pass	100% Pass	100% Pass	100% Pass	

CHART/TABLE 2B – EMPLOYER SATISFACTION SURVEYS



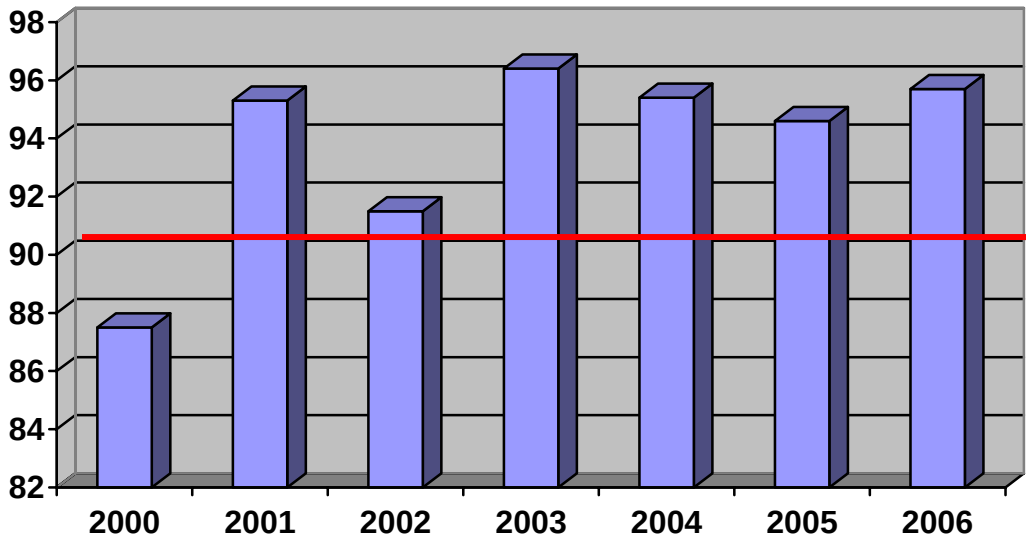
	2002	2003	2004	2005	2006
Average Overall Score (Likert Scale 1-5)	4.10	4.09	4.07	4.40	3.26

CHART/TABLE 3A – NATIONAL MEDICAL LABORATORY WEEK PRESENTATIONS



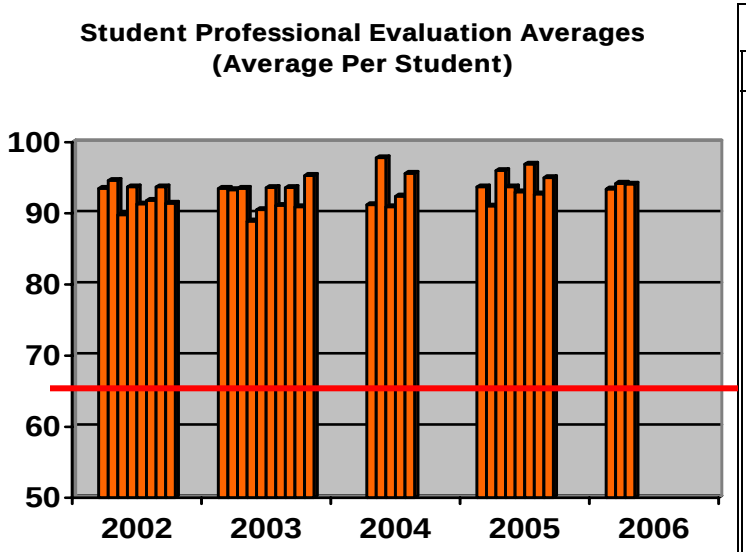
	2003	2004	2005	2006	2007
%Participation	16/16=100%	13/16=81%	12/12=100%	3/3=100%	24/28=86%

CHART/TABLE 3B – RESEARCH PRESENTATIONS



	2002	2003	2004	2005	2006
Individual Student Scores (%)	95	97	95	85	75
	100	94	100	82	96
	87	94	90	98	96
	92	98	95	100	
	90	98	98	95	
	87	97		98	
	87	100		99	
	94	97		100	
		94			
		95			

CHART/TABLE 4A – STUDENT PROFESSIONAL EVALUATIONS



	Graduating Class										
	2002		2003			2004		2005		2006	
Individual Student Scores (%)	90.3	95.0	95.0	95.0	91.0	96.0	94.1	76.0	100	98.7	
	87.8	95.3	91.0	91.4	94.0	98.0	96.0	92.0	97.0	85.3	
	84.0	92.8	98.2	94.0	97.0	92.0	90.1	88.0	100	96.7	
	89.1	84.7	97.0	95.0	90.0	91.0	97.5	99.0	100	91.7	
	95.3	100	95.0	87.5	95.0	97.0	92.6	96.3		91.6	
	95.6	91.2	95.7	83.0	95.0	92.0	95.0	92.0		93.0	
	97.5	87.0	95.0	92.7	94.0	99.0	88.2	95.0		95.0	
	91.4	89.9	95.0	89.5	95.0	96.0	95.0	100		95.0	
	90.9	75.5	77.0	91.3	85.0	100		97.7		83.9	
	95.0	94.6	88.0	96.0	89.0	100		100		96.1	
	91.1	95.5	94.6	93.6	96.0	95.0		95.0		100	
	91.0	95.0	92.1	95.0	93.0	82.0		96.4		95	
	100	92.7	94.3	69.6	84.0	81.0		96.4		94.3	
	95.0	100	95.0	88.8	85.0	96.0		99.0		95	
	92.7	91.0	91.0	89.0	99.0	99.0		71.0		91	
	93.5	95.0	87.0	88.0	93.0	95.0		95.0		91.3	
	87.4	90.6	92.0	96.0	95.0	99.0		92.0		100	
	90.6	99.3	97.5	95.6	99.0	97.0		93.0		100	
	85.1	93.9	98.0	95.0	95.0	98.0		95.0		95	
	95.3	95.0	94.0	90.4	97.0	93.0		94.0		90.5	
	95.9	96.1	95.7	93.0	96.0	100		96.0		91.3	
	95.0	88.5	94.3	90.0	97.0	93.0		93.9			
	92.5	89.5	93.8	95.0	92.0	98.0		91.0			
	84.7	95.0	96.4	95.0	98.0	91.0		87.3			
	92.1	95.0	84.3	96.0	85.0	92.0		95.7			
	90.3	95.6	89.9	95.0	88.0			95.1			
	83.2		92.9	93.0	99.0			94.0			
	93.5		86.0	88.1	98.0			90.0			
	92.8		95.0	96.0	91.0			92.1			
	93.8		91.0	91.7	87.0			83.0			
	95.0		94.0	95.0	95.0			97.5			